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Preface

The collection of papers published here are those presented at the Annual International CHRIE Conference, held at Atlanta, Georgia, USA the 30 July – 2 August 2008. International CHRIE organizes this highly esteemed event since 1946, when the inaugural conference was held at Chicago, USA. International CHRIE is an association representing the majority of universities and associated institutions worldwide offering higher education studies in tourism and hospitality. The aims of this conference are to promote and enhance the quality of research and teaching in tourism, travel, hospitality and leisure education all over the world, by enabling researchers to share good practices and innovative ideas. Over 63 years, the stature of the event has grown to mirror the maturity of research in all fields of tourism. Looking through the papers one cannot help but be impressed by the range of topics covered, the range of research approaches adopted and the quality of research that can justly stand against research in any other field.

This *Proceedings* contains 68 double blind-refereed papers from a total of 134 stand-up papers submitted by academics from 19 different countries – a record number of countries for an International CHRIE Conference! This year a total of 205 papers (134 stand-up papers and 71 poster papers) were submitted for review, representing a modest increase over previous years. The Refereed Papers Review Committee completed 486 reviews (as some papers were triple blind-reviewed) with the valuable assistance of 170 expert reviewers.

We are honored to be the Co-Editors of this *Proceedings* and Co-Chairs of the Refereed Papers Review Committee for this year's International CHRIE Conference. We wish to express our sincere gratitude to all the Associate Editors of these *Proceedings* as well as to all Reviewers who volunteered for this time-consuming but highly important task. Without their hard work it would have been impossible to guarantee the high academic standards of the 2008 International CHRIE Conference.

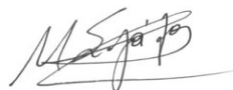
We would also like to thank the Department of Business Administration of the University of the Aegean, located at the Island of Chios in Greece, for the continued support that we received in this project. In addition, we would like to thank our graduate assistant Ms Konstantina Tsiakali who dedicated many hours of work to format the *Proceedings*. Heartfelt thanks are also deserved for the International CHRIE Office for their support and encouragement.

Last but not least, we wish to thank all the authors who worked hard to submit their papers and wished to share their research findings and expertise with all of us.

If you are one of the delegates attending the conference, we hope you enjoy taking part in the presentations as much as reading these papers. For those of you reading these papers who did not attend, we hope that what you read encourages you to submit a paper to the 2009 International CHRIE Conference – we all look forward to seeing you there!



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ANTECEDENTS OF CASINO EMPLOYEE'S JOB SATISFACTION AND ORGANIZATIONAL COMMITMENT

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ABSTRACT

This study examined the current literature on employees' organizational commitment and job satisfaction in various organizational settings. The specific focus was how the internal relationship marketing concept should be implemented to better understand the determinant factors of organizational commitment in the casino industry. Results revealed that the managerial areas in which self-efficacy, self-esteem, and organizational commitment require constructive actions include job assignments, training, leadership, decision making, communication, and reward systems.

Key Words: self-efficacy, self-esteem, job satisfaction, organizational commitment, casino employees

INTRODUCTION

Currently, the hospitality industry is heavily concerned with employee turnover ratio. According to the U.S. Department of Labor (2007), voluntary turnover has increased to 23.4% annually, up from 22.7% the previous year. The accommodation and food services sector showed the highest rate at 56.4%, followed by the leisure and hospitality sector at 52.2%. Consequently, the industry spent \$4,100–\$11,600 per occurrence as a turnover cost (Baird, 2007; Ghiselli, La Lopa, & Bai, 2001). This cost includes advertising, relocation, training, etc. In addition, the turnover cost in the hospitality industry is even more critical when employees have close relationships with customers. Usually, customers build a loyalty-based relationship with certain employees rather than a specific brand of hospitality firm (Stedham & Mitchell, 1996).

Strong competition in the casino industry for good employees has led to a high turnover ratio in this segment of the hospitality industry as well. Traditionally, this turnover issue has not been problematic since the labor pool is typically much greater than supply and employees may be easily replaced. Recently, however, management has begun to recognize the value of keeping good employees and reducing turnover costs. Like customer relationship marketing strategies, the internal relationship marketing concept was introduced to reduce turnover intention in the hospitality industry (Bowen, 1996). Relationship marketing is the philosophy of doing business that focuses on keeping and improving current customers (Bowen & Shoemaker, 1997). Loyal employees achieve high job performance (Widels, 2007), reduce maintenance costs (Susskind, Borchgrevink, Kacmar, & Brymer, 2000), enhance company goodwill (Stedham & Mitchell, 1996), and create customer satisfaction and loyalty (Bowen, 1996). Thus, employers should identify variables that increase job satisfaction, organizational commitment, and reduce employee turnover intention.

Many researchers have examined the antecedents of employee turnover in various organizational contexts. Organizational commitment (Mowday et al., 1979), self-esteem (Gardner & Pierce, 1998; Marsh, 1993), job satisfaction (Odom et al., 1990; Heskett et al., 1994), self-efficacy (Gardner & Pierce, 1998), organizational support (Mount & Back, 1999), and work climate (King, 1999) are the key variables in determining whether employees tend to stay with their current job or switch to other organizations. In addition, a recent study by the state of Louisiana (Louisiana Gambling Study, 2007) found out that casino employees perceived the following factors to be relevant to

the value of their casino job: 1) learned new marketable skills, 2) increased self-worth, and 3) received better health care benefits. Although the majority of respondents were satisfied with their current casino job, 20% of the respondents expressed their intention to leave the organization due to poor working environment, poor pay, and negative feelings about the casino industry in general.

The main purpose of this study was to examine the relationship among key variables including organizational support, work climate, self-efficacy, job satisfaction, self esteem, and organizational commitment in order to identify ways to improve casino employees' job satisfaction level and to further enhance employees' organizational commitment level and, possibly, decrease job turnover intention.

A CONCEPTUAL FRAMEWORK

The model presented in Figure 1 hypothesizes that organizational support, self-efficacy, and work climate positively influence job satisfaction. Job satisfaction subsequently and concurrently influences self-esteem and organizational commitment, whereas self-esteem also directly influences organizational commitment. An explanation of each variable and the proposed relationship between these relationships are presented in the following section.

Organizational Support

Organizational support refers to the employees' perception of the organization's internal service quality as a whole (Shore & Tetrick, 1991). Eisenberger et al. (1990) stated that organizational support is the extent to which an employee believes that their employer is concerned about their well-being. Although each employee has different organizational needs and desires, several common needs should be satisfied to ensure the employee's continued commitment to the organization. Several studies have shown that pay, schedule, training, job security, and benefits are critical factors in organizational support.

In their casino study, Stedham and Mitchell (1996) found that non-supervisory casino employees perceived training as the critical factor in determining job satisfaction. A well-trained employee has role clarity and provides a better quality service to customers and is more satisfied with their current job and organization (Arnett et al., 2002). Also, employees who have received an appropriate amount of information tend to show less role conflict and more job clarity, thus enhancing job security and job satisfaction. Due to competitiveness in the casino workforce, employees' perception of poor job security leads them to consider switching to other organizations. (Arnett, Laverie & McLane, 2002; Ghiselli et al., 2001).

Work Climate

Researchers in organizational behavior studies emphasize the importance of the organization's structure and its climate (Aldrich, 1979; Hall, 1995; Pfeffer & Salancik, 1978). Work climate is defined as the employee's belief about working conditions (Dube, Enz, Reaghan, & Sigauw, 2000). Employees prefer an organization that offers pleasant and rewarding experiences (King, 1999). Many researchers found that employees value an organization that provides opportunities to grow, employs competent and knowledgeable co-workers, and allows employees to be involved in decision-making (Arnett et al., 2002; Carbery et al., 2003; Greenberg, 1990). Employees recognize an organization where they can trust the organization and openly communicate within the organization, as a healthy work climate.

Specifically, employees' job satisfaction is positively related to trust level from two different perspectives. As Dube et al. (2000) stated, employees seek organizations in which they feel trusted and that offer opportunities to work with trusting co-workers and employers. Trust can be defined as a "willingness to rely on an exchange partner in whom one has confidence" (Moorman et al., 1992, p. 315). Ganesan and Hess (1999) and Moorman et al. (1993) found that trust exists between individuals (interpersonal trust), between organizations (organizational trust), or between individuals and organizations (inter-organizational trust). Trust involves a calculative process based on the ability of exchange partners to engage in a transaction that continues to meet its obligations and is based on an estimation of the cost-benefits of continuing the relationship (Doney & Cannon, 1997). In this regard, the employee perceives positive outcomes and believes that these positive outcomes will persist in the future (Aydin et al., 2005). Trust is a major determinant of relationship commitment (Achrol, 1991).

In addition, effective communication is a critical part of positive work climate. Mount and Back (1999) stated that communication is the most central process in organizations. Employees spend tremendous amounts of time collecting and disseminating information concerning such critical matters as company policy, placement, promotion, performance feedback, and so forth. The importance of effective communication has been recognized through numerous studies in various organizational contexts (Clampitt & Downs, 1993; Pincus, 1986). Researchers have found consistently that the relationship between communication satisfaction and job satisfaction is positive (Susskin et al., 2000; Mount & Back, 1999; Sparks, 1994). For instance, Bowen (1996) stated that communicating information collected from customers changed employees' attitudes and performance. Also, it has been found that if the results of customers' comments on service are communicated and recognition is given to those who serve the customer well, then the communication has significant effects on employee job satisfaction. Specifically, the majority of the Louisiana gambling study respondents stated that effective communication channels are the top determinants of casino employees' job satisfaction level.

Self-Efficacy

Self-efficacy refers to a person's belief about the probability that one can successfully execute some future action or task (Gardner & Pierce, 1998). A strong sense of self-efficacy is positively related to better health, higher achievement, and better social integration (Schwarzer, 1992). Also, self-efficacy has been conceptualized as a trait held by people, reflecting the expectation of their capability to perform various tasks successfully (Eden & Zuk, 1995). According to Bandura's social cognitive theory, expectations of self-efficacy determine whether coping behavior will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles and aversive experiences (Bandura, 1977). An employee who believes in being able to produce a desired effect can achieve a more active and self-determined career path (Scholz et al., 2002). Self-efficacy has a significant relationship with predetermined action that further enhances the motivation of the actual behaviors (Bandura, 1997). Highly self-efficacious employees are active, able to manage situations, try hard, creatively solve problems, set goals, visualize success, and are proud of their current status (Gardner & Pierce, 1998; Scholz et al., 2002). Consequently, highly self-efficacious employees are more likely to be satisfied with their jobs.

Job Satisfaction

Job satisfaction results when individuals perceive their jobs as fulfilling values that are considered important to them (Locke, 1976). Job satisfaction is usually defined as an affective or emotional response toward one's job (Kreitner & Kinicki, 1992). Williams and Hazer (1986) stated that job satisfaction refers to an employee's state of emotion and affective responses to specific aspects of the job. Locke (1976) defined the concept of job satisfaction as a pleasurable or positive emotional state resulting from the appraisal of one's job. O'Reilly et al. (1991) explained that job satisfaction embodies the attitudes held by individuals about their jobs. It stems from their perceptions of their jobs and the degree of fit between individuals and their organizations.

Due to the unique nature of the hospitality industry, and the inseparability of customers and employees, employees' job satisfaction is closely related to customer satisfaction and loyalty (Heskette et al., 1994). According to the service profit chain, internal customers (employees) should be satisfied first in order to ensure better service performances and hence increase external customers' satisfaction level (Heskette et al., 1994). Also, satisfied employees tend to stay with the organization and spread positive word-of-mouth to others. Thus, satisfied employees increase the organizational commitment level (Jerome & Kliener, 1995) and reduce turnover intention (Shaw, 1999), thereby saving the organization in terms of both financial and human resources.

In addition, job satisfaction can be a source of self-esteem for employees. According to Arnett et al. (2002), an employee's affective evaluation of the job increased when they perceived themselves as members of a positively viewed group. The same was true for self-esteem. Employees with a high level of job satisfaction because the organization fulfills their needs tend to have more pride and enhanced self-esteem.

Self-Esteem

Many researchers have conceptualized self-esteem as a hierarchical and multifaceted phenomenon (Marsh, 1993; Wells & Marwell, 1976). Global self-esteem is defined as one's overall self-evaluation where role-specific self-esteem is the metric of self-evaluation (Simpston & Boyle, 1976). For instance, a hotel general manager could self-evaluate himself as a person overall, whereas he could also evaluate himself as a hotel manager, father of his children, or a husband to his lovely wife. Since the concept of self is multifaceted, Pierce et al. (1989) developed the

concept of organization-based self-esteem. This concept is defined as the degree to which employees believe that they can satisfy their needs by performing roles within the context and rules of an organization. Employees with high organization-based self-esteem perceive themselves as important, meaningful, and worthwhile within their organizations (Canbery et al., 2003).

Unlike self-efficacy in terms of personal traits, organization-based self-esteem is developed by many antecedents. Managerial respect (Marsh, 1993), organizational structure (Gardner & Pierce, 1998), and job satisfaction (Kim et al., 2005) positively influence each employee's organization-based self-esteem. Pierce and his colleagues (1989) argued that employees' high self-esteem has strong implications for their work-related motivation, commitment, and loyalty.

Organizational Commitment

Organizational commitment is defined as a strong desire to maintain employment in the organization (Mowday et al., 1979), loyalty to the organization, and mobilization of all employees in the development of its goals, purposes, and infrastructure (Lee et al., 1999). Satisfied employees and employees with high self-esteem are more likely to be attached to the organization (Pierce et al., 1989). Also, highly committed employees are less likely to leave the organization (Allen & Myers, 1990). Researchers agreed that organizational commitment should be treated as a multidimensional construct (Adams & Jones, 1997; Allen & Meyer, 1990; Meyer & Allen, 1997; Meyer & Herscovitch, 2001). Allen and Meyer (1990) found that three separate streams of commitment and more comprehensive understanding of the nature of commitment could be achieved when all three are considered simultaneously. Allen and Meyer's (1990) three-dimensional approach—*affective*, *continuance*, and *normative*—explains employees' psychological attachment to their organization.

Affective Commitment is based on affective or positive emotional attachment to the organization (Allen & Meyer, 1990). In their study of membership behaviors in professional associations, Gruen et al. (2000) described this form of commitment as "the magnitude of the member's psychological attachment to the organization on the basis of how favorable he/she feels about the organization" (p. 37). ***Continuance Commitment*** refers to the magnitude of the member's psychological attachment to the organization on the basis of the perceived costs associated with leaving the organization (Gruen et al., 2000). Numerous researchers agree that continuance commitment was developed based on Becker's (1960) theory of side bets (Allen & Meyer, 1990; Fullerton, 2003; O'Reilly & Chatman, 1986) that the employee's investments (or side bets) in an organization (i.e., the development of work friendships, time, energy spent mastering a job skill, political deals, and job effort) comprise barriers that weaken alternative employment attractiveness. Finally, ***Normative Commitment***, the last form of Allen and Meyer's (1990) three-dimensional approach, is based on the individual's sense of moral obligation to the organization (Allen & Meyer, 1990). Gruen et al. (2000) conceptualized it as the magnitude of the member's psychological attachment to the organization on the basis of perceived moral obligation to maintain the current relationship with the organization. In sum, Allen and Meyer (1990) insisted that "employees with strong affective commitment remain because they want to, those with strong continuance commitment because they need to, and those with strong normative commitment because they feel they ought to do so" (p. 3).

Hypothesis

This study investigates the structural relationships among employees' perception toward organizational support, work climate, self-efficacy, job satisfaction, self-esteem, and organizational commitment within the casino industry. The following relationships are hypothesized based on the literature review.

- H1: Casino employee's perception toward organizational support is positively related with his/her job satisfaction.
- H2: Casino employee's perception toward work climate is positively related with his/her job satisfaction.
- H3: Casino employee's self-efficacy has positive association with his/her job satisfaction.
- H4: Casino employee's job satisfaction has a positive association with his/her self-esteem.
- H5: Casino employee's job satisfaction has a positive association with his/her organizational commitment.
- H6: Casino employee's self-esteem has a positive association with his/her organizational commitment.

METHODOLOGY

A self-administered questionnaire was developed to assess the employees' perception on each construct. Organizational support (i.e., I had the effective training to perform my current job.), work climate (i.e., My managers are open to ideas.), and self-efficacy (i.e., I am confident that I could deal efficiently with unexpected events.) were considered as exogenous variables, whereas job satisfaction (i.e., I am satisfied with current job), self-

esteem (i.e., I am important in this organization.), and organizational commitment (i.e., I feel a strong sense of belonging to this organization.) were treated as endogenous variables. A 7-point Likert (1 = Strongly disagree; 7 = Strongly agree) scale was used to measure the indicators. Casino employees who are employed at two casino properties under same management in Korea were surveyed in summer 2007. Confirmatory factor analysis was conducted to confirm the underlying structures of each construct as well as to assess the reliability and validity of multiple measurement items. Structural equation modeling was employed to assess the relationships among the constructs by using LISREL 8.72.

RESULTS

The questionnaires were distributed to 390 casino dealers at two properties under the same management. Of the 390 distributed questionnaires during regular shift meetings, 351 were returned. After eliminating the unusable responses, 328 responses were coded for data analysis, resulting in a response rate of 86.3%. Seventy three percent of respondents were female employees (248). The median age group of the respondents was 21 to 29 years and the most of respondents (96%) earned 2-year or 4-year college degrees. A majority of the respondents (233 respondents, 71%) indicated that they had been working as a casino dealer for 1 to 2 years. Another 8% of the respondents (26 respondents) indicated that they had been working as casino dealer for more than 5 years.

Because the data was collected from two different locations under the same management company, a comparison of the group mean test was conducted to determine whether it was appropriate to merge the data or not. The result of the group mean comparison test showed that there was no significant difference in any of the variables in Locations A and B. Furthermore, multi-group analysis by using structural equation modeling showed that there was no significant difference among the regression coefficients between the two data sets. Thus, the data was merged for further analysis. A reliability test was used to assess the internal homogeneity among items in this study. The coefficient alpha estimates (See Table 1) for the multi-item scales used in this study exceeded the minimum standard for reliability of 0.7 recommended by Nunnally and Bernstein (1994) for basic research. Thus, the results indicated that these multiple measures are highly reliable. Construct validity assesses the degree to which a measurement represents and logically connects, via the underlying theory, the observed phenomenon to the construct. Following Anderson and Gerbing's (1988) two-step approach, a measurement model was estimated prior to the structural model. The results for the measurements of multiple constructs were very good: ($\chi^2(222) = 772.12$, $\chi^2/df = 3.47$, RMSEA = .05, CFI = .95, NNFI = .94). All of the indicator loadings for constructs were significant ($p < .01$).

Table 1
Results of Confirmatory Factor Analysis^a

Construct	Internal Consistency	Item	Factor Loading ^b	t^c
Organizational Support	0.82	I received adequate level of training.	0.83	17.32
		I had the effective training to perform my current job. ^d	0.96	
		The training materials were very educational.	0.73	16.21
Work Climate	0.84	My managers listen and pay attention to me.	0.80	16.41
		My managers offer guidance for solving job-related problems.	0.79	15.79
		My managers are open to ideas.	0.78	15.08
		My managers know and understand the problems faced by me. ^d	0.89	
		My managers trust me.	0.86	18.29
		I feel comfortable to discuss job related issues with my immediate supervisor.	0.91	19.79
		I have information about how my work performance compares to others.	0.71	10.46
Self-Efficacy	0.85	If I am in trouble, I can think of a good solution.	0.79	17.63
		I am confident that I could deal efficiently with		

		unexpected events.	0.82	16.70
		I can handle whatever comes my way. ^d	0.88	
Job Satisfaction	0.92	I am satisfied with my job. ^d	0.92	
		I am satisfied with the career path within the company.	0.88	12.31
		I am happy with what I am doing with the current job.	0.91	24.00
Self-Esteem	0.94	I am important in this organization.	0.92	27.87
		I am valuable in this organization.	0.94	29.39
		I am trusted in this organization. ^d	0.94	
Organizational Commitment	0.84	I really feel as if this organization's problems are my own.	0.76	16.96
		I feel a strong sense of belonging to this organization.	0.86	19.76
		I feel like part of the family at my organization. ^d	0.89	

^a Fit indices: $\chi^2(222) = 772.12$, $\chi^2/df = 3.47$, RMSEA = .05, CFI = .95, NNFI = .94; ^b Standardized loading estimates; ^c Based on two-tailed tests; for t-values greater than 1.96, $p < .05$; ^d Parameter fixed at 1.0 for the maximum-likelihood estimation. Thus, t-values were not obtained for those fixed.

Discriminant validity exists when the average variance extracted (AVE; $\rho_{vc(\eta)}$) of each construct exceeds the square of the coefficient representing its correlation with other constructs (Fornell & Larcker, 1981), as shown in Table 2. For instance, the AVE of the organizational commitment construct (.72) exceeded the square of the inter-correlation (shared variance) between job satisfaction and organizational commitment (.46).

Table 2
Measure correlations, the squared correlations, and AVE

Measure	Correlations among latent constructs (squared) ^a						AVE ^b
	OS	WC	SEf	JS	SEt	OC	
Org. Support (OS)	1.00						.82
Work Climate (WC)	.33(.11)	1.00					.63
Self-efficacy (SEf)	.14(.02)	.26(.07)	1.00				.56
Job Satisfaction (JS)	.30(.09)	.55(.30)	.25(.06)	1.00			.70
Self-Esteem (SEt)	.28(.08)	.47(.22)	.44(.19)	.47(.22)	1.00		.80
Org. Commitment (OC)	.22(.05)	.23(.05)	.27(.07)	.68(.46)	.46(.21)	1.00	.72
Mean	5.26	4.29	4.68	4.45	4.78	4.33	
Sd	.91	.83	.79	1.06	.95	1.04	

^a Correlation coefficients are estimates from LISREL. $p < .01$, all coefficients were significant at the .01 level.

^b All average variance extracted (AVE) exceeded .50, showing construct validity.

Confirmatory Factor Analysis

Using LISREL 8.72, a maximum likelihood confirmatory factor analysis was undertaken to assess the overall fit of the nine-factor model. The model was composed of organizational support, work climate, self-efficacy, job satisfaction, self-esteem, and organizational commitment. The results showed good fit for the six-factor model, $\chi^2(222) = 772.12$, RMSEA = .05, CFI = .95, NNFI = .94. The χ^2/df value of 3.47 fell within a range of acceptable values (two to five as suggested by Bollen, 1989) as well as reaching the less-than-two level proposed by Byrne (1998). The goodness-of fit indexes were excellent. Table 1 presents the standardized factor loadings for each construct.

Structural Model Results

The theoretical model was tested (see Figure 1). For this model, goodness-of-fit and practical indices were as follows: $\chi^2(200) = 761.99$, $p = .00$, $RMSEA = .052$, $CFI = .96$, $NNFI = .95$. Two competing models were tested against the theoretical model in this study. In the first competing model, the direct and indirect effects of exogenous variables on all endogenous variables were tested. In other words, additional direct paths from organizational support, work climate, and self-efficacy to self-esteem and organizational commitment were included. This model produced the following statistics: $\chi^2(194) = 747.72$, $p = .00$, $RMSEA = .056$, $CFI = .95$, $NNFI = .94$. The difference in fit between the competing model and the theoretical model was not significant ($\Delta\chi^2 = 14.27$, $\Delta df = 6$, $p > .01$), which indicates that the theoretical model was more parsimonious than the first competing model.

Figure 1
Standardized Maximum-Likelihood Parameter Estimates for the Theoretical Model



^{a, b} indicate statistical significance at $p \leq .001$ and $p \leq .01$, respectively; t-values are in parentheses. The estimates are standardized regression coefficients.

The second competing model, the direct path from job satisfaction to organizational commitment was deleted from the theoretical model. The goodness-of-fit and practical indices for this model were as follows: $\chi^2(201) = 764.66$, $p = .00$, $RMSEA = .054$, $CFI = .95$, $NNFI = .94$. Like the previous model, the difference in fit between this model and the theoretical model was not significant ($\Delta\chi^2 = 2.67$, $\Delta df = 1$, $p > .01$), which indicates that the theoretical model was still more parsimonious than this competing model. The fit of the model indicates that the theoretical model is parsimonious and fits well, thereby providing a good basis for further testing.

All exogenous variables showed significant impacts on job satisfaction ($\gamma_{11} = 0.17$, $t = 3.56$, $p < .01$; $\gamma_{12} = 0.54$, $t = 9.13$, $p < .001$; $\gamma_{13} = 0.22$, $t = 4.25$, $p < .01$). As Mount and Back (1999) argued, work climate was the most significant antecedent of job satisfaction followed by self-efficacy and organizational support.

Next, the effects of job satisfaction on self-esteem and organizational commitment were tested. The regression path from job satisfaction to self-esteem was significant ($\beta_{21} = 0.63$, $t = 11.12$, $p < .001$). This result was consistent with Arnett et al.'s (2002) suggestion that an employee with a positive evaluation of their job showed a positive association with their level of self-esteem. Moreover, the direct effect of job satisfaction on organizational commitment was significant. As consistent with the result of Allen and Meyer's (1990) study, satisfied employees showed relatively high scores in organizational commitment level.

Finally, as mentioned earlier, the path between self-esteem and organizational commitment was tested. As Figure 1 indicates, the standardized regression coefficient between them was not significant ($\beta_{32} = 0.06$, $t = 1.03$, $p > .01$). This finding was not consistent with previous findings. However, this may be due to a suppressed effect

because the inter-correlation between job satisfaction and organizational commitment was much higher than that of self-esteem and organizational commitment. The inconsistent findings may also be because the model included the mediating role of self-esteem in the relationship between job satisfaction and organizational commitment. These variables were found to have some multicollinearity issues. Thus, it appears that self-esteem did not have significant mediating role in the relationship.

DISCUSSION

The present research focuses on internal relationship marketing techniques as a method to increase organizational commitment and reduce the negative effects of voluntary turnover. It proposes a conceptual model and hypothesizes that organizational support, self-efficacy and work climate positively influence job satisfaction. Job satisfaction subsequently and concurrently influences self-esteem and organizational commitment. Organizational commitment has gained interest largely by its demonstrated negative relation to turnover. Committed employees have been found to be less likely to leave an organization than those who are uncommitted (Mowday, Steers, & Porter, 1979).

The present research found that managers could increase casino employees' organizational commitment by utilizing internal relationship marketing techniques. The research identified specific areas that managers could increase organizational commitment amongst the employees by paying close attention to actions that enhance employees' self-esteem, self efficacy and work climate. Specifically, the research indicates that managers who pay attention to training, communication satisfaction, and self-management can significantly increase employees' perceived organizational support, self efficacy, and work climate leading to an increase in overall job satisfaction and self esteem. Employee job satisfaction leads to a higher level of organizational commitment and possibly lower turnover. Again, in an industry where turnover may be as high as 300%, any method to reduce this turnover and its negative effects is of high practical significance to the industry.

LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDIES

Several limitations are associated with the present study. First, the results may not be generalized to other casino companies. Data from this study was collected from dealers at a single casino management company. Since other casino management companies probably have different management philosophies, there most likely will be different levels of effects between organizational commitment and its antecedents. In addition, the sample was only Korean casino employees. Thus, the results may not be generalized to casino employees in the United States. However, since the major portion of the results from this study were consistent with previous findings in different parts of the hospitality industry, it is worthwhile to conduct cross-cultural and/or cross-industry studies. Furthermore, this type of research has the potential to create valuable information if it is conducted as a longitudinal study employing continual monitoring and evaluation of working environment. Additionally, job assignment, job security, scheduling, perceived benefits and reward systems are some key job attributes that should be included in future studies.

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THE EFFECTS OF INFORMATION TECHNOLOGY ON EMPLOYEE SATISFACTION IN MULTI-UNIT RESTAURANTS

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ABSTRACT

This study examines, in the restaurant operations, how perceptions of the information technology (IT) applications influence the growth satisfaction of the employees and how the perceived growth satisfaction affects internal work motivation and general job satisfaction. The survey was distributed to the staff of 65 full-service, mid-scale chain restaurants owned by a firm in Korea. The response rate was 57%, yielding 266 completed surveys for the data analysis. SPSS 15.0 and AMOS 7.0 were used for the data analysis. The Structural Equation Modeling (SEM) statistics supported four proposed among six hypotheses. The SEM results were interpreted relative to industry implications

Key Words: IT, restaurants, growth satisfaction, internal work motivation, general job satisfaction, SEM

INTRODUCTION

Organizations today are facing an unparalleled level of turbulence in their external environments. In accordance with environmental turbulence, Simon (1973) affirms that organizations need to take after information-processing systems. To create a more efficient and effective organization in response to the changing environment, an organization needs to be redesigned. Organizational redesign is defined as the set of managerial actions used to change an organization's technologies, processes, and structure (Huber & Glick, 1993). The goal of redesign efforts is to improve organizational effectiveness, problem solving, and ability to adapt to a continually changing environment. Information systems are vital in this process because of their ability to expand the knowledge base of all organization members and to enhance communications among members (Douglas, 1999). Information system is a major component in organizational redesign, because it alters organizational roles, skill requirements, interaction or communication patterns, career paths, bases of power, strategy, and culture (Guzzo & Klein, 1991).

The final component of an organization's redesign effort is its effect on employee satisfaction (Douglas, 1999). Griffin (1991) pointed out that as employees perceive positive changes in their jobs, they reveal higher levels of motivation and satisfaction. A number of publications examined the relations among growth satisfaction, satisfaction with coworkers, internal work motivation, general job satisfaction, and job satisfaction (Hackman & Sawler, 1971; Hackman & Oldham, 1975, 1976, 1980). While fewer efforts have been made to understand the influences of the organizational changes on employees' satisfaction in a dynamic organizational environment, there are plethora of evidences that the social environment influences satisfaction variables. In an attempt to empirically measure the effects of organizational change on employee satisfaction, the organizational change is examined with demonstrable implications for employee satisfaction (Howard & Frink, 1996).

It would be worthwhile to demonstrate the different perspectives of the relationships between satisfaction and environmental conditions. Changed environment such as information system adoption might influence changes in internal work motivation and employee satisfaction (Howard & Frink, 1996). The purpose of the present study is to investigate the influences of the organizational change induced by IT adoption on restaurant employees' perceptions about the job. The specific perceptions examined in this study included employees' perceptions on job

growth satisfaction, internal work motivation and general job satisfaction. Based on the literature review (Howard & Frink, 1996; Douglas, 1999), the relations among the employees' perceptions about the job were identified, and the research model was proposed accordingly as depicted in Fig. 1. The literature review entails the relations among the specific perceptions included in the research model.

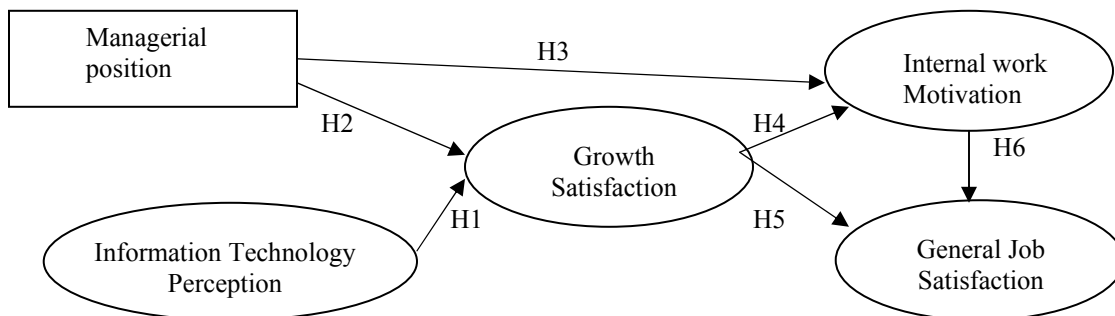
RESEARCH OBJECTIVES AND HYPOTHESES

The suggested model holds five research objectives to fulfill the proposed research purpose in the restaurant operation settings which underwent organizational changes induced by IT adoption: 1) to determine if employees' IT perception affects growth satisfaction positively, 2) to determine if employees' being on managerial position affects positively growth satisfaction and internal work motivation, respectively, 3) to determine if employees' perceptions on growth satisfaction affects positively internal work motivation and general job satisfaction, respectively, 4) to determine if employees' perceptions on internal work motivation affects general job satisfaction positively.

The following hypotheses were developed to test the study objectives.

- H1: Perceptions about use of IT applications will exhibit a positive relationship with job growth satisfaction.
- H2: Managerial workers will perceive higher job growth satisfaction than non-managerial workers.
- H3: Managerial workers will exhibit higher internal work motivation than non-managerial workers.
- H4: Growth satisfaction will exhibit a positive relationship with internal work motivation.
- H5: Growth satisfaction will exhibit a positive relationship with general job satisfaction.
- H6: Internal work motivation will exhibit a positive relationship with general job satisfaction.

Figure 1
Depicts the relationships among constructs proposed by the hypotheses
Proposed Model with Hypotheses



THEORETICAL BACKGROUND

Control Variables

Perceptions about adapting advanced technology are proposed to influence growth satisfaction. Much like job redesign, reorganization and feelings about adjustments influence changes in satisfaction, as the reorganization might influence growth opportunities in the organization (Campion & Stevens, 1991; Hackman & Oldham, 1976; Hulin, 1991). The level at which an individual is positioned in an organization may also influence the changes in growth satisfaction of employees (Reilly, Brett, & Stroh, 1993). Managerial employees may feel more opportunities for growth in the changed organizations, because managerial employees may be informed of or involved in planning and implementing the changes within the organization. This may increase in the perception of growth opportunities. Workers at managerial positions have been found to exhibit a positive relationship both on career loyalty and job involvement (Reilly et al., 1993). Much research has indicated that growth satisfaction yielded a positive relationship with both internal work motivation and general job satisfaction (Hackman & Lawler, 1971; Hackman & Oldham, 1975, 1976).

Information Technology and Job Satisfaction

Thatcher and colleagues (2003) presented and tested a conceptual model linking perceptions of the internal work environment and external markets to IT worker turnover. The researchers suggested that organizational commitments mediate perceptions of the workplace and external environment on turnover intention, as organizational commitment mediated the influence of job satisfaction, perceived job characteristics, and perceived competitiveness of pay on turnover intention.

McMurtrey, Grover, Teng, and Lightner (2002) investigated the job satisfaction of IT professionals in an environment where computer aided software engineering tools were used. The results indicated that in a computer aided software engineering tool environment, people with a predominant technical career orientation showed higher job satisfaction than those with a predominant managerial orientation. It was interesting to note in a study of examination of the personality traits in relation to job satisfaction of IT professionals that lots of perceptions of individuals, such as assertiveness, emotional resilience, extraversion, openness, teamwork disposition, customer service orientation, optimism, and work drive, were significantly related to job satisfaction (Lounsbury et al., 2007). Engstrom et al (2005) empirically tested and demonstrated that IT support enhanced employees' job satisfaction, including personal development, internal motivation and the total scores for psychosocial aspects of job satisfaction, for those group who were offered with the support, while they looked at the experiment and control groups.

Information Technology Research for Restaurant Industry

In the restaurant industry, Huo (1998) determined factors affecting sustainable competitive advantages measured by profit margin and market share and observed changes in the competitive position of restaurant firms before and after IT installation. Ansel and Dyer (1999) presented a framework for an integrated approach to systems planning and provided a decision model for chain restaurant operators to evaluate investments in IT systems. Huber and Pilmanis (2001) outlined a framework for designing management information systems (MIS) for the quick service restaurant industry.

Park (2006) adopted Technology Acceptance Model (TAM) to investigate the acceptance of the Intranet in restaurant franchise systems. The author extended the TAM model by adding an external variable, franchise support. Regression analysis reveals that TAM is a valid model in predicting Intranet adoption in restaurant franchise systems. Ham et al. (Ham, Kim, Forsythe, in-press) investigated the external factors of IT systems in restaurant operations in relation to constructs in TAM. The external factors were user characteristics, system quality and organizational support and their positive relations to perceived ease of use, perceived usefulness and intention to use were tested using Structural Equation Modeling (SEM), while all the relations were verified except the one between perceived ease of use and intention to use. The result implies that functionality is more important when the vendors develop POS and other restaurant use software. Baek and de Guzman (2006) compared the level of needs and expected benefits of IT applications perceived by restaurant employees. The results of this study indicated that managers revealed stronger perceptions that IT is beneficial and is thus needed in restaurant operations.

Oronsky and Chathoth (2007) explored the factors that motivate managers in chain and independent full-service restaurants to decide whether or not to implement technology and compared the current use of IT related advance of these types of restaurants, and how these managers perceive the impact of technology on the firm. A case study was conducted to examine the framework of full-service restaurants to implement new technology.

There is a paper reviewed a dozen hospitality and tourism journals from January 2003 to July 2004 on the themes touching on information technology and hospitality (O'Connor & Murphy, 2004). In that paper, authors pointed out that there is a woeful lack of research on the use of IT in industry segments other than hotels, even not a single article appeared in a high quality academic journal on the subject dealing in restaurant and foodservice area in that 18 months. Authors also said foodservice and hotels face similar IT issues such as allocation resources, evaluating projects, and measuring how the adoption of enterprise-wide information systems affects the management and structure of hospitality companies, how the introduction of technology influence staff effectiveness, productivity, and moral since foodservice and hotels are people-intensive business.

Since the purpose of the present study is to investigate the influences of the organizational change induced by IT adoption on restaurant employees' perceptions about the job such as job growth satisfaction, internal work

motivation and general job satisfaction, it would not only fulfill both academic and industrial need but also build up and extend knowledge in this field of study.

METHODOLOGY

Sample and Data Collection

The sample of the study was the staff of full-service, mid-scale restaurants owned by a firm, which consisted of 65 chains across the country, in Korea. They were chosen as targets for the study since those restaurants were recently technologically automated and computerized to a certain extent. The survey was conducted in winter of 2004, January 12 through January 24. Part-timers or the full-time employees who had been working in the restaurant industry for less than six months were not included in this survey due to their scarcity of knowledge on restaurant IT systems. Out of the 465 questionnaires administered, a total of 288 questionnaires were returned. Among them, completed surveys were 266, which were included in the data analysis. Thus, the effective response rate was 57%.

Research Instrument

Through an extensive literature review and an in-depth interview with expert panels of technology and restaurant managers, a questionnaire was developed. The expert panels were comprised of two corporate-level managers and four store-level managers who had managed IT-related works in restaurants and three researchers were IT specialists. The instrument was pilot-tested to the group of managers and employees of multi-unit restaurants in Korea, which restated the accuracy of wording.

Part 1 of the survey included questions about employees' perceptions, such as those toward IT adoption, growth satisfaction, internal work motivation, and general job satisfaction. Perceptions of employees about IT adoption in their work place were comprised of eight items which were derived from previous studies and modified for the present research (Howard & Frick, 1996; Camison, 2000). The items were ease of accomplishing the work, effectiveness of work, more agile and operative management, enterprise image improvement, increment in service quality, improvement of information quality for management and decisions making, increase in personnel motivation, and so on. The items were measured with a 5-point Likert-type scale (1=strongly not needed, 5=strongly needed). Growth satisfaction by the IT adoption in their work place was also measured with 5 items, which were adopted from the Job Diagnostic Survey (JDS) (Hackman & Oldham, 1980). In addition to the four items of this scale, a fifth item, "Opportunity to learn new things," was added from a previous publication (Howard & Frick, 1996). Perceptions about internal work motivation (3 items) and general job satisfaction (3 items) were also generated from the JDS, which were also measured using a 5-point Likert-type scale (1=strongly disagree, 5=strongly agree). The Part 2 of the survey was demographic information of respondents, such as gender, age, education, current position, and years of experience. In this study, IT was defined as 'computerized operating technology' in order for the respondents to be clarified on the questions.

Data Analysis

SPSS 15.0 was used for the collected data analysis. Descriptive statistics were computed for all the variables. Reliability test was performed on each latent construct to verify if individual indicator variables are good to represent the designated construct. Amos 7.0 was employed to verify the hypotheses proposed in the research model. A measurement model was developed and tested to verify the uni-dimensionality of the constructs in the research model. As a final analysis of the study, Structural Equation Modeling (SEM) was performed to empirically test the relationships of the constructs in the proposed model. The results from SEM were obtained to test the hypotheses in the model.

RESULTS

Descriptive Statistics of Respondents

The majority of the respondents worked on non-managerial positions (86.5%), while more than two-thirds were female employees (69.2%). About two-thirds of the respondents completed high school education (67.7%) and sixteen percent received a college education. Their work experiences at the current position varied from a year (44.3%), 1-3 years (35.9%), and longer than 3 years (20%). Further their work experiences in food service operations ranged from a year (29.3%), 1-3 years (42.8%), and longer than 3 years (27.8%).

Measurement Model

Reliability test and confirmatory factor analysis were performed on the four latent constructs to evaluate the unidimensionality of each construct. The Cronbach's alphas for all four constructs are at the acceptable level, over .60 (.89 for perception on IT, .63 for growth satisfaction, .63 for internal work motivation, .81 for job satisfaction). The proposed measurement model was a good-fit with overall statistics, in addition to an indicator of root mean square error of approximation ($\chi^2 = 305.88$, $df = 143$; $p < .001$; CMIN/DF=2.14; Comparative Fit Index (CFI) = .93; Root Square Error of Approximation (RMSEA) = .06; Goodness-of-Fit Index (GFI) = .89).

Results of Structural Equation Model

Using SEM, the statistics were generated to see if the proposed model fits the data. According to all the statistics ($\chi^2 = 338.078$, $df = 161$; $p < .001$; CMIN/DF=2.1; CFI=.92; GFI = .88; AGFI = .85; RMSEA = .06.), the proposed model proved a good fit to the data and the statistics are presented in Table 3. With all the statistics indicating goodness-of-fit, the proposed model is not rejected.

The other group of statistics suggesting the model fit relative to the inclusive constructs is Squared Multiple Correlations (SMC). The proposed model draws that there were three dependent variables, Growth Satisfaction (GS), Internal Work Motivation (IWM), and Job Satisfaction (JS). According to SMC statistics, the model explained 30% of variance in Growth Satisfaction (SMC=.30), 40% of the variance in Internal Work Motivation (SMC=.40), and 51% of the variance in Job Satisfaction (SMC=.51).

Table 1 illustrates the results of the hypotheses testing proposed by the research framework. Among six hypotheses, four hypotheses were accepted while two hypotheses (H2 and H3) were not accepted at an alpha of .05 level. Hypothesis 1 examined the impacts of employees' perceptions about IT adoption in their operations on the growth satisfaction. Hypothesis 1 (Perception on IT → Growth Satisfaction, $\beta = .55$, $p = .03$) was accepted with a positive path coefficient. The more restaurant employees feel positive towards using IT in their work, the higher growth satisfaction they would have with their job.

Hypothesis 2 and 3 are concerned with the effects of being on a managerial position on how they feel about growth satisfaction and internal work motivation, respectively. Neither of Hypothesis 2 (Managerial Position → Growth Satisfaction, $\beta = -.03$, $p = .61$) and hypothesis 3 (Managerial Position → Internal Work Motivation, $\beta = .10$, $p = .08$) were supported by SEM statistics. Therefore, whether they are on a managerial position or not may not seem to affect their growth satisfaction or internal work motivation. This finding contradicts the previous study, regarding the effect of organizational restructure on employee satisfaction, that managerial employees were more satisfied with growth opportunities than their non-managerial counterparts, further they demonstrated higher levels of internal work motivation (Howard & Frink, 1996).

Table 1
Results of Structural Equation Model

Path	Standardized Path Estimate	p-value	Hypotheses testing
H1: Perception on IT → Growth Satisfaction	.55	.03**	Accepted
H2: Managerial Position → Growth Satisfaction	-.03	.61	Not Accepted
H3: Managerial Position → Internal Work Motivation	.10	.08	Not Accepted
H4: Growth Satisfaction → Internal Work Motivation	.62	.03**	Accepted
H5: Growth Satisfaction → General Job Satisfaction	.46	.04**	Accepted
H6: Internal Work Motivation → General Job Satisfaction	.34	$P < .001$	Accepted

$\chi^2 = 338.078$, $df = 161$; $p < .001$; CMIN/DF=2.1; CFI=.92; GFI = .88; AGFI = .85; RMSEA = .06.

*** $P \leq .001$

** $P \leq .005$

Hypothesis 4 and 5 investigated the relationships of restaurant employees' perceptions on growth satisfaction to internal work motivation and general job satisfaction, respectively. Hypothesis 4 (Growth Satisfaction → Internal Work Motivation, $\beta = .62$, $p = .03$) and Hypothesis 5 (Growth Satisfaction → General Job

Satisfaction, $\beta=.46$, $p=.04$) resulted in positive and significant path coefficients. Restaurant employees, when they feel more growth satisfaction, they are more likely to have higher internal work motivation, and job satisfaction. That is, it is critically important for the management to provide employees with an opportunity for the job growth in order to offer a pleasant environment while they are motivated in their works and satisfied with the jobs accordingly.

Hypothesis 6 was supported as internal work motivation yielded in a positive and significant effect on general job satisfaction ($\beta=.34$, $p<.001$). The more employees have internal work motivation, the more employees appear to be satisfied. It is indicating that although growth satisfaction is an important antecedent for general job satisfaction, motivation also can be an important determinant for general job satisfaction. Management needs to develop tactics for employees to become motivated in the job. In summary of the SEM results interpretation of the proposed model, four hypotheses were supported while two were not. As the two hypotheses, which were not accepted, were related to being in a managerial position, the previous literature about the variable may be updated with the restaurant setting.

CONCLUSION AND DISCUSSIONS

The study intends to examine the influence of perceptions of the IT adoption on restaurant employees' perceptions about the job. The survey was distributed to the staff of full-service, mid-unit chain restaurants owned by a firm in Korea. The response rate was 57%, while 266 completed surveys were included in the data analysis. SPSS 15.0 and AMOS 7.0 were used for the data analysis. SEM was a primary analysis to assess the proposed hypotheses developed in fulfilling the study objectives. Based on the results associated with hypotheses, the importance of the various facets of employee satisfaction are further illustrated, including the notions that employees viewing the IT adoption as positive appear to be more satisfied with growth opportunities. The centrality and importance of growth opportunities, which influenced general job satisfaction and internal work motivation directly, were demonstrated by the present study.

The findings that being on a managerial position was insignificant to growth satisfaction and internal work motivation was not parallel to previous literature revealing the high level of growth satisfaction and internal work motivation of managerial employees than their non-managerial workers in other contexts. As this study was conducted in restaurant setting, the outcome may differ. The possible explanation could be that the benefits non-managerial employees perceived from IT application might lead to the high perceptions of growth satisfaction and internal work motivation almost close to the level of managerial employees, which resulted in no significant difference between the two groups. Considering the benefits in the side of non-managerial employees, such advancements in input devices, including touch-screen and remote hand-held devices, monitor management for table availability and menu order, table buzzer system for waiters or waitresses, communication network coordinating production from kitchen with menu orders in the dining room etc. might influence their feelings of convenience in their work and generate the positive emotion finally leading to the high level of growth satisfaction and internal work motivation. This emphasizes the importance of IT adoption in restaurant operations to keep non-managerial employees from walking their job out easily, as they feel more comfortable with their jobs.

One of the contributions of this research to the body of literature is the examination of satisfaction as IT is adopted and thus, modeling this process in restaurant setting. Much research has been conducted on satisfaction, but only a few studies have examined job satisfaction in a dynamic environment. The movement toward demonstration causality in the job context-satisfaction relationship could be considered as a big progress. It was demonstrated in the present study that IT adoption influenced growth satisfaction, which influenced internal work motivation and general job satisfaction.

Another finding is the importance of IT applications to the restaurant operations in that the level of growth satisfaction and internal work motivation of non-managerial workers can be increased to that of managerial position workers by adopting IT in their work environment. Restaurant business may build up its competitive advantage by using IT as a motivational instrument and as a tool for the improvement of employee satisfaction, as well as improving the organizational process.

This study still holds limitations and thus future research suggestions. This study was conducted in multi-unit restaurants owned by a firm showing the limitation to generalize the result to the whole restaurant business. Future study would be expanded to other types of restaurants. The sampled restaurants of the study were very top-

notch in IT utilization. It would be useful to compare the outcomes with those which do not install the advanced IT that much in the restaurant operations. Comparison of the results between the sectors may induce knowledge on the influence of IT use/adoption in restaurant business on employee satisfaction, which can let owners/managers be informed of what to do to improve employee perceptions in relative to IT adoption.

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AN EXPLORATORY STUDY OF RECRUITMENT PRACTICES OF PRIVATE CLUBS IN ONTARIO

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ABSTRACT

Private clubs are gaining attention in the hospitality literature as a unique segment of the hospitality industry. However, research on human resource management in clubs, and recruiting in particular, is very limited. This paper examines various aspects of the recruiting process in clubs in one chapter of a professional association in Canada. Results suggest that recruitment in clubs is a shared responsibility within the organization. Further, it appears that methods and responsibilities could be greatly developed and refined. Finally, potential future research topics are discussed.

Key Words: recruiting, human resource management, private clubs, club management, Ontario, Canada

INTRODUCTION

The management of human resources is at the forefront of much of the hospitality management literature as it continues to be an important topic. The management of human resource activities has been shown to have a direct impact on the effectiveness of organizations. In particular, recruitment was listed as one of the human resource practices that can drive the bottom line of an organization in a study performed by Watson Wyatt Worldwide (Warech & Tracey, 2004). The research also found that organizations that had a formal recruitment strategy typically had a higher market value than organizations of similar size without a formal recruitment strategy (Warech & Tracey, 2004). With a tightening labor market, smaller organizations need to become more efficient at preparing long-term recruitment strategies (Higgins, 2004). This includes non-profit organizations such as clubs.

Research surrounding recruitment and human resources (HR) in private clubs is very limited. One industry article demonstrates the need for further research on recruitment in private clubs by stating, “Any discussion of potential research topics must begin with recruitment and selection. The recruitment and selection of managers is a long and involved process and is at least as challenging as it is in other hospitality sectors” (Robinson, 2002, p. 4).

The purpose of this study is to examine how private clubs in one club management chapter in Ontario manage employee recruitment. Specifically, the research sought to: (1) Identify who performs recruiting activities in clubs; (2) Establish the time allotted for recruitment by private club managers; (3) Determine types of recruitment techniques used in the private club segment and; (4) Identify recruitment challenges faced by club managers in private clubs.

BACKGROUND – HUMAN RESOURCE MANAGEMENT

The use and need for human resource management (HRM) is more accepted in today’s society than it was ten years ago (Schwind, Das & Wagar, 2001). Organizations understand the benefits of human resources and have allocated additional resources to improve this area of organizations. Since, organizations are becoming increasingly complex and consumers are demanding more from companies, ensuring that the right employee is hired for the job and retaining those employees is of the utmost importance. HRM includes all activities from recruiting through development. Each of these activities presents certain challenges but recruiting continues to be identified as a primary challenge.

Recruiting in the Hospitality Industry

Much of the literature on human resource practices in the hospitality industry, and on recruitment in particular, discusses the need for organizations to be more proactive at recruiting and retaining employees (Higgins, 2004). However there are two different ideas as to how to go about attracting employees with one industry expert saying “We, as an industry, need to put our heads together and develop some guidelines and training tools on how to attract talent and retain them once you’ve got them.” (Higgins, 2004, p. 15)

Other experts disagree with having a set of industry standards and believe that individual organizations should employ a customized system for attracting candidates. These experts believe dynamic and innovative programs should be developed by individual organizations to maintain a form of competitive advantage, via human capital (Cline, 1997; Schadler, 2004). In the end, both sides agree that requirements for attracting employees must be improved.

HR practices and recruitment practices in particular can be an area in which organizations gain a competitive advantage by reducing the costs of high turnover and training. In addition, recruiting the right employees can be the difference of creating a profit or sustaining a loss.

LITERATURE ON PRIVATE CLUBS

Numerous papers have been written on a vast array of topics relating to management, management practices, management traits and effective management as they relate to private clubs. Many of these papers have been able to establish a link between these variables and effective human resource practices. Recently, there has been quite a bit of research in the area of club manager competencies (for instance, Perdue, Ninemeier, & Woods, 2002). The researchers compared two studies that were completed in 1992 and 1999 and differences in the expected competencies over the seven-year time period (both of which surveyed club managers asking them to prioritize competencies by importance and frequency of use). The research found that many of the same competencies were still applicable since the 1992 study to the 1999 study, however, the rankings of the competencies had changed over the seven years between studies. Human and professional resources, in both studies, were among the top three competencies required to be a successful club manager.

Looking more specifically at human resources in clubs, Barrows and Gröschl (2003) examined whether clubs in the Southwest Ontario Branch of the Canadian Society of Club Managers (CSCM) employed a human resource director. A roundtable discussion was moderated by one of the authors using managers from the CSCM Southwestern Ontario Branch. The study indicated that the majority of clubs did not employ any personnel to deal directly with HR issues. Barrows and Gröschl (2003) demonstrate the need for a HR presence in clubs as they stated, “Given the continued growth of the club industry, the increasing complexities of running a private club, the increased specialization of the human resource field and the competitive nature of employee recruiting in Ontario, these authors argue that now may be the time to explore the possibility of adding human resources expertise into the club environment” (Barrows and Gröschl, 2003, p. 12).

Other human resource related papers on clubs have focused on leadership, mentoring and training. Little has focused on recruiting. Since recruiting is one of the major challenges for private clubs in Ontario (which had been established anecdotally by the researchers) the next step is to research how clubs perform this task. A review of the literature suggests that there is currently a gap in the amount of research on the topic of recruitment and there is a need for such research.

RESEARCH METHODOLOGY

A self-administered questionnaire was mailed to the 18 general managers who were members of the CSCM Southwestern Ontario Branch. The survey was conducted in June, 2005. Questions focused primarily on the recruitment methods, responsibility of recruiting and time spent on HR functions by club managers. The questionnaire was pilot tested by members of the academic society and by professional club managers.

The response rate was 78%, perhaps demonstrating a great deal of interest in examining recruiting practices and human resource issues in clubs.

RESULTS

Club Size and Type

The clubs' membership size ranged from 280 members to 2000 members with a mean of 1041 members per club. Examining the number of employees per member showed that the smallest club surveyed had 1 employee to every 3 members while the largest club had 1 employee for every 14 members.

The clubs surveyed for this research were typically golf and country clubs with 10 of the 14 respondents selecting this type of club designation to describe their organization. City clubs were reported twice while one club reported being a hunt club and the final respondent described their club as a golf and curling club.

Staffing and Human Resource Personnel

On average, the Southwestern Ontario Branch employs 33 full-time and 69 part-time employees per club. The largest amount of full-time staff reported by general managers was 60 and the smallest was 8 full-time employees. The results also show that eleven (79%) of the clubs do not have a human resource professional employed at their club. The remaining three (21%) clubs had at least one human resource professional on staff, one of which reported employing three HR professionals.

HR Functions in the Absence of an HR Manager

Since 11 (79%) of the clubs surveyed do not employ a human resource manager or any HR professionals, the question arises as to who performs these duties in their absence. General managers can take on the burden of HR functions themselves or delegate the task to other supervisors and/or department heads within the club. The data show that five (45.5%) clubs delegate the job to department heads who normally performed HR functions in the absence of an HR manager or professional. Some clubs split the duties between the general manager and controller, with two (18.2%) of clubs reporting that general managers and controllers both execute these tasks.

Who Performs the Recruitment Tasks

Managers were also asked who performs recruitment tasks. The general managers of each club were asked to list all positional staff that performs recruitment tasks on a regular basis. Data from the questionnaires show that all clubs utilize their department heads when recruiting line-level employees. The results are provided below in Table 1.

Table 1
Employees Performing Recruitment Tasks

Employees Performing Recruitment Tasks	n	Percentage
Department Heads	14	100
Assistant Manager	5	35.7
Human Resource Manager or Human Resource Professional	3	21.4
Line Level Supervisor	3	21.4
General Manager	2	14.3
Peers/Other Employees	1	7.1

***multiple responses allowed**

Department heads are typically given duties to recruit line-level staff, as they are also normally given the duties to manage human resource functions when a HR professional is not employed at the club. Also, clubs report utilizing their department heads when recruiting line-level employees.

Clubs also reported using line-level supervisors, assistant managers and peers to aid in the recruitment process. For clubs that do not perform job descriptions in advance to recruiting employees, it may be acceptable to monitor similar positions and incorporate these into a job description.

Time and Methods

Another important factor in the recruitment process is the amount of time allocated by management to filling job vacancies. Managers reported spending an average of six hours per week on recruiting line-level employees. When comparing this figure to which individual is performing the recruitment task, typically department heads, it is clear that nearly an entire day is allocated to this HR function alone. The implications suggest that general managers must be aware of the time involved in the recruitment process by their upper management team.

An interesting result from this research is in the time allocated on a per week basis by clubs that do not employ a human resource professional and those clubs that do employ human resource staff. Clubs that employed an HR professional spent on average ten hours on recruiting while clubs that do not have an HR professional spent five hours on average per week.

Respondents were asked to identify the methods used to recruit employees. The results are provided below in Table 2.

Table 2
Methods Used by Private Clubs to Recruit Line Level Employees

Rank	Description	N	Percentage
1	Newspaper Ads	14	100
2	Referrals	10	71.4
3	Word of Mouth	10	71.4
4	Internal References	8	57.5
5	Government Agencies	7	50
6	Career Fairs	6	46.2
7	Internet Recruitment	5	38.5

***multiple responses allowed**

In addition to full-cost methods (such as advertising), clubs also employ no-cost methods or input-based methods. Referrals, word of mouth, internal references, and government agencies are all means that do not require capital investment. All general managers reported using newspaper ads to recruit line-level employees; one reason that GM's may use input or no-cost methods is to offset the costs of newspaper notices.

Internet recruitment is another method to used recruit in clubs in the Branch. Five general managers reported utilizing internet recruitment to recruit line-level employees. Although no past data exists on this topic, an interesting finding of this study is the widespread use of this advanced technology for the recruitment process. General managers provided additional information on this topic by breaking down the use of internet recruitment into groups, club websites, and external websites.

The research found that clubs use two types of internet methods to recruit employees: resource intensive and input-based. General managers in the Branch use a balance between these two types. Clubs use these methods to target a large potential candidate pool while balancing the costs of each of these methods. Further research on when these methods are used could provide information on the usefulness of each of the methodologies when general managers are time stricken to fill positions.

Recruitment Challenges

General managers were asked to rank the challenges of recruitment by assigning a value to each of the options. The scale for the question involved placing a value ranging from one to seven, one being the largest obstacle to recruitment and seven affecting the recruitment process the least.

General managers perceive the lack of potential employees as being the greatest challenge facing their clubs. As is true in other sectors of the hospitality industry, private clubs are attempting to manage labor shortages.

This result demonstrates the difficulties that general managers face in obtaining employees that have the skill set and desire to work in a service industry position. With the employment rate rising, general managers are witnessing a shrinking labor pool in their town or city. Potential employees with experience in the hospitality industry are using these skills to gain employment in other industries.

Additional challenges mentioned included competition for potential employees, wages and turnover rates. Time and financial constraints were ranked as the least challenging factors.

Documenting the challenges that face private clubs in their effort to recruit line-level employees readily provide general managers an enhanced comprehension of the issues facing their colleagues. Managers can also assess which of these challenges are issues within their clubs and plan a strategy to combat these problems. Acquiring workers from a depleting labor pool and a more competitive labor market has become a major issue from private clubs in the Southwestern Ontario Branch.

DISCUSSION

One of the primary results of the study shows the shared responsibilities of human resource activities, including recruiting. Clubs that reported splitting the HR tasks between two managers may experience positive results. It would be easier for each position to become specialists or better educated in one or two areas of human resources, while this would not be as probable should either of these managers take on the full load of HR tasks on their own. Also, managers would be better equipped to balance the additional workload demanded of them by covering only a smaller proportion of the HR duties.

However, there could be a downside when management splits HR tasks. Some duties may be interrelated and management may assume that these duties are not part of their responsibility, thus creating a gap in the HR services provided to club employees. Communication between these two management positions is critical to maintain a split responsibility of the human resource function. If communication between these management positions deteriorates then service levels to employees will suffer.

When issues arise, one of the two managers may become weighed down in the resolution process. Again, with these additional responsibilities, daily tasks may become neglected or the HR tasks themselves may be ignored. Balancing the workload of HR functions could alleviate such difficulties for either manager. Even though this is a better option than delegating all human resource functions to one employee who is untrained in HR, this method of managing human resources does not equal or replace the value that would be derived from employing a trained HR professional.

Results indicated that department heads, supervisors and peers had significant recruiting responsibilities. It is not surprising that clubs use peers to participate in the recruitment process. Peers and line-level supervisors can offer a different prospective than management, as they have a better understanding of the skill requirements needed to be successful in a line-level position at the club.

Recruitment methods identified by managers were fairly typical of methods used in other hospitality segments although emphasis is still given to placing ads in newspapers suggesting that recruiting efforts may be misplaced. There has been much discussion regarding the inherent disadvantages of newspaper advertising.

Typically, the essential skills of the hospitality industry are transferable to other industries. Other industries are also competing for employees who have hospitality training. General managers rated competition for potential employees slightly behind lack of potential employees on the scale. These results indicate that these clubs must explore new avenues of recruitment in order to compete with other industries. Clubs can no longer rely on using one or two methods to recruit line-level employees and must expand their target labor pool which they recruit from.

Finally, it appears that managers do not perceive financial resources to be a major issue in recruiting line-level employees. This may be an opportunity for general managers to invest additional resources in the recruitment process. Managers should examine their clubs' yearly need for recruitment of line-level staff and decide if the cost / benefit of investing in this human resource function would benefit the club. Clubs can establish benchmarks and

compare their current turnover rate. This would provide management with an estimation of the cost to recruit line-level employees for a season or year and reveal if additional resources are needed to recruit employees.

CONCLUSIONS AND RECOMMENDATIONS

This paper has examined issues surrounding recruiting in a sample of private clubs in Ontario. Several findings emerged which are of interest. First is the determination that few clubs have an HR professional to take responsibility of specific HR activities such as recruiting. Instead, responsibilities are spread among managers, supervisors and peers. Further, there seems to be no agreed upon standard pertaining to procedures for managing human resources and recruitment within this sample of club managers. Instead, there is a range of methods that clubs are inclined to use to when managing HR and recruitment tasks. It is also clear that not all clubs follow the best practices as identified in the literature. Managing a labor force of over 100 employees is a massive task for general managers. As a result, many managers are currently using resources that would be better spent focusing on their primary objectives (servicing members) instead of on HR and recruitment functions.

Further, the amount of time spent on recruitment per week is an indicator of how personnel, such as department heads, are taken away from their principal duties to discover potential workers. The data does not include the amount of time that is required to select an employee, provide the new hire with sufficient orientation, and training new workers. Adding these to the time would undoubtedly increase the amount of time spent on attracting, selecting, training and evaluating line-level employees by upper management.

Many clubs would benefit from employing an HR professional to administer all HR functions including recruiting. Delegating tasks to employees who may not possess the educational background and/or experience to properly manage human resource responsibilities could lead to negative outcomes, such as a high turnover rates or poor service quality due to inadequate training. These negative outcomes can lead to increases in the cost of recruiting, selecting, training and evaluating line-level employees.

Regarding methods used, emphasis is still placed heavily on newspaper advertisements, a problematic source at best. However, those clubs that are using the Web seem to be doing so effectively and seem to understand the medium. The use of club websites, and posting positions on an employment link, is a cost-effective method for recruiting employees, since most of the clubs surveyed have a website and adding a link for employment is not a difficult or expensive process. One weakness of this tool is that club websites may not reach a large target of potential employees. External websites are a more costly method of recruiting employees, however, using these websites normally targets a larger pool of job candidates. Management must weigh the cost to the benefit of reaching the additional prospective workers. They must also consider the possibility of compromising the privacy of the club. Future research examining the methods used by clubs to recruit employees via the internet would be an interesting study.

Perhaps the most interesting finding from this research is the challenges facing general managers in recruiting line-level employees. The labor market appears to be the largest challenge facing clubs when recruiting. The challenge of recruiting potential employees may be linked to the methodologies used to recruit line-level employees with input-based methods being used relatively often in clubs. These techniques typically limit the number of potential employees that clubs can pull from. Since clubs are limiting themselves to such a small labor pool, it would be advantageous for them to investigate other methods that target a large labor pool which will potentially result in more applicants. Therefore, expanding the range of prospective applicants undoubtedly would benefit the clubs in the Branch.

Clubs in the Southwestern Ontario Branch use many different methods to manage their human resource functions. The research indicates that no two clubs perform HR tasks and recruitment in an identical fashion. In comparison to other industries, in particular the hotel sector, these clubs do not perform human resource tasks in an efficient manner. The techniques used can hurt a clubs performance in areas, such as service quality, if recruitment and human resource functions are not monitored and managed properly. General managers should be aware that their clubs may experience increased costs in recruiting employees due to high turnover rates and determine an action to prevent this from reoccurring.

RECOMMENDATIONS

General managers must consider the benefits of having an HR professional managing human resource tasks for the organization. Management can decide to hire a professional to work in-house, on a permanent basis, or to outsource all duties to a human resource firm. Hiring an in-house professional entails investing a great deal of resources. This route is the optimal solution to better managing clubs' human resource functions. However, this option may not be feasible for all clubs due to fiscal limitations. General managers also have the option to outsource human resources to a contract company that will perform tasks for their club. Many firms currently offer these services and clubs could benefit from having professionals managing all functions as required by the organization. Management could seek cost savings by not employing a full-time HR professional if the club is not large enough to warrant or necessitate full-time staff to manage these functions. In this case, clubs may consider outsourcing or sharing a professional with other clubs.

In the absence of hiring a full time HR professional, clubs should look to develop a formal recruitment plan and attempt to become more creative in their recruiting strategies. With the competition for good employees increasing, they cannot afford not to.

Future Research

This study has created opportunities for potential further research on the topics of human resources and recruitment in private clubs. The first of such future research would be to conduct a longitudinal study that explores how many HR professionals are employed throughout the club industry and if there are any emerging trends, i.e. more clubs are employing human resource professionals. Further research on these topics would assist in clarifying how general managers are approaching HR challenges.

Understanding the benefits of HR professionals in private clubs would be another interesting study, in particular studies concentrating on clubs that are currently employing an HR professional and how it has affected the organization's performance. Areas that could be touched upon include club turnover rates, the cost of recruiting, selecting and training new employees, and employee satisfaction with the services offered. A comparison study between clubs that employ an HR professional and the time allotted to the recruitment tasks and turnover in these clubs against those clubs that do not employ an HR professional would also be a valuable future research project.

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PLURAL FORMS BUT NOT PLURAL PROCESSES: MANAGING INTERNATIONAL CHAINS IN THE LODGING INDUSTRY

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ABSTRACT

This qualitative research explores the plural form concept (Bradach, 1995), applying it to six case study firms. Findings reveal mixed evidence of the achievement of all the benefits of plural forms. The relevance of ratcheting is questionable and the benefits of control and flexibility are only apparent across some organisation designs. We conclude that the plural form has partial relevance to international lodging chains and recommend that senior managers need to be more effective in operating more than two organisation designs.

Key Words: lodging chains, plural forms, organisation design.

INTRODUCTION

Chains are now a dominant force in the corporate world. In this paper we evaluate the complexity of managing international chains in the lodging industry and in so doing look to further explore the plural form model. Plural organisations are those that adopt mixed market entry modes and researchers have explored these in chain management under the guise of contract mixing (Bai & Tao, 2000), dual distribution (Dnes & Garoupa, 2005; Srinivasan, 2005) or plural forms (Baker & Dant, 2007; Bradach, 1995, Bradach & Eccles, 1989; Cliquet & Croizean, 2002; Dant, Perrigot & Cliquet, 2007). These investigations have predominantly sought to explain the rationale for using multiple modes and have focused on firms that mix two types of market entry: ownership and franchising. However, many chains are now simultaneously employing more than just these two entry modes as they seek to grow outside of mature domestic markets. McNaughton (2002) argues that global competition is motivating firms to seek innovative ways of entering new markets and increasing the likelihood that multiple channels will be used. Eclectic theories of modal choice also support the use of different market entry methods for different market locations. As with the plural form, studies on internationalisation have tended to concentrate on why firms have used different modes (Litteljohn, Roper & Altinay's, 2007), rather than how these complex, diversely affiliated firms are managed. Whilst it goes without saying that as chains internationalise the challenges of managing these portfolios of mixed modes will become more acute, research has so far neglected to focus upon both the simultaneous use of multiple entry modes and this phenomenon from the perspective of internationalisation.

Our research aims to fill these gaps by adopting a modal management perspective rather than modal choice genre. We have chosen lodging chains as the context for the study given that plural forms have been significant in this industry for some time with the largest chains employing at least three modes (Brookes, 2007). As services, lodging chains are a powerful international force, are mature in their experience of internationalisation and continue to internationalise at rapid pace (Strauss, 2008). In addition, managing a lodging chain entails balancing tensions and tradeoffs involved in complicated relationships with even more parties e.g., unit owners, investors and franchisees. For these reasons, lodging chains appear an appropriate research focus and in their international operational maturity demand investigations focused more on management and organisational issues rather than just growth decisions (such as where and how to develop). This paper therefore seeks to examine the management of plural forms in the international lodging industry. It begins by exploring the extant literature on the plural form, its benefits and management. It then outlines the research approach and methods employed to investigate international lodging chains as plural forms. The paper reveals that the plural form model is only partially relevant and partially realised.

THE CONCEPT OF THE PLURAL FORM: ITS BENEFITS AND MANAGEMENT

Research into the use of multiple entry modes began with the work by LaFontaine & Kaufmann (1994) who found in their cross-industry study (which included lodging firms) that contrary to much of the previous theory of ownership redirection, franchisors operate a mix of company-owned and franchised units in order to gain synergistic benefits of this plural organisational form. They conclude:

“as heavily franchised systems experience a relaxation of their resource constraints and become more able to expand through company-ownership, they may do so only to take advantage of the plural form benefits and not at all in an attempt to reach the near complete ownership envisioned by Oxenfeldt and Kelly.” (p. 110)

While researchers have continued to explore plural forms from different perspectives or disciplines, two predominant questions have underpinned these research efforts; ‘what mode should be used in which market?’ (in other words, pre-entry decisions) and ‘given the existence of mixed modes (franchising and ownership) what is the best configuration?’. Just as in foreign market entry research, there has been a fixation with the examination of the reasons for this co-existence or the conditions that motivate firms to deploy plural structures. Viewed as a choice between franchising and running company outlets, studies have sought to evaluate those factors that favour franchising in one situation and ownership in another. However, Milgrom & Roberts (1992, p. 566) observe, there seem to be no conclusive answers to ‘which factor?’ and ‘when?’ and Dnes & Garoupa (2005) add there is no single explanation of the choice between franchising and integration that is likely to work for all observed systems at all times. Bradach & Eccles (1989) believe that modal choice is principally linked to the vagaries of circumstances. Furthermore, interpreting the modal choice for a given site as a rational response cannot tell us much about the dynamics at work in such structures (Cliquet & Croizean, 2002, p.239). Hence later studies looked to answer the second question as to the best configuration or the optimum configuration for the plural form organisation. It is this latter area of research that reveals the potential benefits of the use of mixed modes or plural forms. These benefits can be categorised into those related to the growth process or their additive benefits (Bradach, 1998) and others to do with control and flexibility as illustrated in Table 1. These research efforts suggest that chains can grow more quickly by using the plural form, rather than through a single market entry mode. They also identify a number of benefits that relate specifically to greater degrees of consistency and efficiency and thus control, and greater degrees of flexibility or responsiveness to market demands through the localised autonomy inherent in franchise agreements.

Table 1
Plural Form Benefits

Plural Benefit	Specific Benefit Identified	Indicative Author
Additive Benefits	Existence of both is related to better opportunities Overcomes resource constraints; effects rapid market penetration Enables faster development Enables both parties to grow – owner and franchisee	Bradach & Eccles, 1989 Bradach, 1998 Bradach, 1998 Affuso, 2002
Control Benefits	Positively influences the global management of the chain Enables ongoing comparison of resources, financial returns and information Profit optimisation: own most profitable units, rest franchised Helps maintain uniformity & achieve system-wide adaptation Greater efficiency (in certain conditions) through eliminating problems with vertical integration or market governance	Bradach & Eccles, 1989 Powell, 1990 Laulajainen, 1993 Bradach, 1998 Srinivasan, 2005
Control & Flexibility Benefits	Operational creditability & control increased through ownership while franchising provides source of creativity Provides balance between goodwill effort (the public good) and the benefit of capturing positive externality Efficiencies through centralised control and effectiveness through localised autonomy	Dant et al, 1992 Bai and Tao, 2000 Mitronen & Moller, 2003

Whilst there has been an acceptance that there are benefits of using plural forms, Cliquet (2000) comments that the usual arguments about franchise and company systems explain very little about variations in organisational forms. Bradach’s (1995) investigation of how the benefits of the plural form are achieved through organisational

design has however, been credited with transforming ‘the classic vision of the relationship between franchising and company-owned systems’ (Cliquet & Croizean, 2002, p. 240). Bradach (1995) investigated how plural chains achieve key organisational goals of growth, uniformity, systemwide adaptation and local responsiveness for his doctoral thesis with further publications of his research appearing in 1997 and 1998. Examining organisational structures and processes used within restaurant chains, he identified the chains use one set of organisational processes within franchised divisions and another, different set within the company-owned units. He argues that using these two sets of processes gives rise to a third or ‘plural’ organisation process that creates the synergistic benefits for the firm thereby better enabling them to achieve their goals. The model forwarded by Bradach (1995) and displayed in Table 2, illustrates the key plural processes used for linking the different organisational arrangements of franchise and company-ownership. These manifest themselves as processes of modelling, ratcheting, socialisation and mutual learning and allow for the simultaneous attainment of uniformity and adaptation of operations across the chain.

Table 2
Plural Processes

Key Attribute	Company	Plural-form process	Franchise
Structure	Hierarchy	Modelling process →	Federation of mini-hierarchies
Control system	Budget, MIS, authority	Ratcheting process ←→	Incentives, contracts, and persuasion
Career paths	Ascend hierarchy	Socialisation ←→	Business builders and small business owners
Strategy making	Centralised expertise	Mutual learning process ←→	Local experience

(Bradach, 1997, p. 283)

Building on Bradach’s work, Cliquet (2000) undertook survey research commissioned by the French Federation of Franchising, involving 21 companies managing 35 chains in three industries – hotel and catering, bakeries and cosmetics. Interestingly, he found that the concept of plural forms has various goals depending on the sector studied; the challenges described by Bradach (1995) seem to apply to the hotel industry, whereas in the bakery and cosmetics industries, local responsiveness as the basis for a network’s dynamic development and commercial stimulation does not appear to be a major concern for network operators. He concludes that plural forms are used as store chains expand, referring to lifecycle effects, and therefore Bradach’s model could only partially be verified for mature networks, but with some exceptions for different sectors. For example, hotel networks with a strictly limited concept remained in company arrangements and changed only when they went international. Cliquet (2000) is critical of the original model suggesting that it is too static to be used in networks at different periods in their lifecycle or for different industry sectors. He also suggests that it fails to emphasise the strategic and cultural symbiosis between directors’ mentalities, unit managers and the context. In other words, it is too centred on the relationship between franchisees and operator rather than incorporating other agents. However, Cliquet finds these criticisms to be perfectly normal, stating that Bradach after all examined only a limited number of very large mature companies in the same sector in the US (where legislation is less restrictive than in France).

A further study by Cliquet & Croizean (2002) assessed whether Bradach’s model was valuable in the context of French retailing. Unable to achieve cooperation from large players more interested in market leadership than organisational issues in managing plural forms, their research focused on eight smaller players in the French cosmetics markets. The researchers found that for smaller counterparts the plural form was an attractive way to compete with the acquisitive behaviour of the large companies as managers’ sought to extract advantages they could get from this organisational form. However, they did find that the plural form concept in the cosmetics industry was not the same as the one described by Bradach (1998). In particular, they found that the goal for having a plural form was more strategic than managerial, and even if the managerial aspects were not entirely missing, they were simply more technically oriented, i.e., training and concept testing. Therefore, they concluded that plural forms are used more to structure than to stimulate. However, their findings seem to be more about the advantages and disadvantages of combining franchising and company-owned units (the mix) rather than about organisational and

process perspectives and the architecture of the plural form. As the title of their article implies, their study was more about the strategic move ‘towards the plural form’ and the benefits and advantages of the modal mix rather than modal management. The authors themselves conclude that those plural forms that work best are those with a low proportion of company-owned outlets (10-15 percent) and that chains which go beyond this ratio are likely to run into trouble. However, they did find that plural forms seem to provide good protection against predators.

Two researchers who did examine the management of the plural form are Mitronen & Moller (2003). From their findings into a large Finnish multi-chain retail organisation they conclude that the plural form (they use the term ‘hybrid organisation’) is not necessarily a rational choice and that trust is an important element in the functioning of such an organisation design. Their contribution is in concluding that managers of such organisations must be effective in operating two types of organisational designs. To them control and management of a hybrid organisation is demanding, and success requires an understanding of overlapping governance mechanisms.

Whilst a recurring theme of most of these studies is how to achieve a balance between the interest of different parties and how to balance the strengths and weaknesses of different organisation structures and processes, they remain somewhat limited. Firstly they all evaluate the management of only two modes. Secondly, their data is drawn from only one national context – the U.S.A, France or Finland - rather than being international. A recent working paper by Dant et al, (2007) has compared plural forms in franchise networks in the USA, France and Brazil. However, this cross-country comparison is not the same as an examination of international plural form networks. From a review of all these studies we forward a set of research questions that allow for a new interpretation of the plural form phenomenon and form the basis of our enquiry:

1. How will a more diverse mix of modes impact on the management of the plural form?
2. Are plural form benefits realised in international chains with diverse entry modes?
3. Is the plural form model relevant to international lodging chains?

METHODOLOGY

We investigated the design and management of international lodging chains as plural forms through a qualitative study, similar to those of Bradach (1995), Cliquet (2000) and Cliquet & Croizean (2002). This approach enabled us to add ‘flesh and bones’ (Patten & Appelbaum, 2003) to the research by explaining organisations through the people that work within them. The research was conducted in two phases using a case study strategy. Case studies have a distinct advantage when the phenomenon is little understood and the dynamics of it need to be incorporated in the research (Yin, 2003). The first phase of the study investigated organisation designs within international lodging chains within the boundaries of individual firms. By focusing on the hotel firm as the unit of analysis, a clear line of distinction is drawn between different organisations involved in the operation of lodging chains. A multiple holistic case study strategy was adopted to increase generalisability (Yin, 2003) and cases identified through a purposive sampling approach in order to select cases rich in information about the research problem (Alam, 2005). A range of secondary sources were used to develop a composite profile of chains listed in Hotels annual ‘Corporate 325’ survey comprising country of headquarters, ownership, number of countries of operation, number of hotels and hotel rooms, number of brands and the different market entry modes used. This process yielded a sample of 27 lodging chains that employ at least three different market entry methods and operate in at least five countries, similar to Todd & Mather’s (1999) study of global hotel brands. These 27 chains comprise 2,323,899 hotel rooms or 29% of the corporate hotel roomstock.

Following a pilot study, access was negotiated to six case study firms from the purposive sample, well within the recommended size range for multiple case studies (Shaw, 1999). Primary data was collected using semi-structured key informant interviews; as it provided an economical approach to gaining ‘global’ data on the organisations (Bryman, 1994, p. 49). In this first phase of the study, interviews were conducted with single corporate level informants in each firm responsible for strategy and development, marketing, distribution or operations management. The interview schedule was organised around pre-defined themes (Eisenhardt, 1989) that included organisation and informant background, organisation structure, and organisation processes for decision-making, control, coordination and communication. Interviews were tape recorded for accuracy and transcribed. Triangulation was achieved through document review and archival analysis, including the company organisation charts (Yin, 2003). In addition, a number of processes were employed to increase the validity and reliability of case

study research as advised by Reige (2003). For example, replication logic was employed to enhance external validity and a case study protocol and database were developed to increase reliability.

The second phase explored inter-organisational design through a single embedded case study strategy to investigate a typical or representative case (Yin, 2003). The unit of analysis at this stage was the hotel brand as this facilitated the exploration of design across the different organisations responsible for owning and operating the brand. The typical case reflects an international hotel brand that is operated by three different firms through master franchise agreements and each firm itself employs a range of market entry modes. Multiple informants responsible for development, marketing, operations and finance were interviewed from each of the firms involved in managing this brand including the brand CEO. As in phase one, the interview schedule was designed around predetermined themes and the same procedures were used for recording and triangulating data, and for increasing reliability and validity.

In both phases, data was analysed using NVivo according to the ‘three concurrent flows of activity’ (Miles & Huberman, 1999, p. 16): data reduction, data display and conclusions drawing. Data reduction took place through both descriptive and interpretive coding (Gibbs, 2004). Descriptive coding was undertaken using the predetermined themes in the research instrument. Interpretive coding then took place according to the themes that emerged from the informants. Data was displayed by case study firm as well as by market entry mode in order to facilitate within and across case comparison. The extant literature was then used to draw conclusions from this study (Perry, 1998).

Plural forms and their benefits in international lodging chains

The case study chains under investigation employed a variety of entry modes including ownership, leasehold agreements, management contracts, franchise and master franchise agreements. As plural forms, the chains comprise organisational divisions that encompass different entry modes and display significant design differences. Similar to Bradach’s (1995) study, these differences are reflected in formal structures as well as the organisational processes for decision-making, control, coordination and communication. Informants reported that these plural forms are ‘complicated’ and often ‘very confusing’ to run as every design is ‘run a little different’, a finding comparable to that of Mitronen & Moller (2003). Three distinct designs were identified for owned, leased and managed portfolios (OLM), franchise, and master franchise portfolios as displayed in Table 3. The findings further reveal that these design differences have an impact on the plural form benefits achievable in international lodging chains.

Plural benefit one: chain growth

Chain growth has been identified as one of the key benefits of using the plural form. Bradach’s (1995) model identifies this as the additive plural process whereby the use of both franchising and company-owned units facilitates chain growth at a faster rate than either single market entry mode on its own. This study reveals that the use of mixed entry modes enables international hotel chains to achieve faster growth through taking advantage of opportunities available in different regions. As the CEO of one of the sample chains explained, expansion was, ‘not restricted by geographical boundaries, not limited by narrow strategies.’ Indeed, of the 27 chains in the purposive sample, those that were the most geographically diverse employed the widest mix of entry modes. Another informant suggested that ‘in building brands we adopt different operating and ownership models as appropriate’, giving weight to Bradach & Eccles (1989) argument that modal choice is related to the vagaries of circumstances. The findings also reveal that the chains within this study would continue to rely on diverse market entry modes to achieve international expansion goals. As such, we argue that the plural form is perceived to facilitate and enhance the growth of international lodging chains through the additive process.

Plural benefit two: control

As Table 1 highlights the plural form better enables the chain to achieve greater efficiency by comparing returns from different organisational forms and using these to positively influence profitability. Control is a key consideration of the chains within this study and Table 3 displays the decision-making processes and the mechanisms used to achieve financial and quality control within the different designs identified. However, there is limited evidence of the development of the plural processes of modelling, ratcheting and socialisation between the different divisions as identified by Bradach (1995). Modelling occurred in Bradach’s study when franchisees modelled their organisation structures and systems on those of the corporate-owned divisions. There is no evidence of this process in the sample chains studied. Likewise, there is no evidence of ratcheting, the process whereby the comparison of performance between design divisions serves to stimulate each division to improve performance.

However, we acknowledge that the process of ratcheting may have questionable relevance in international firms where diverse market conditions could make performance comparisons meaningless.

Socialisation is the third plural process identified by Bradach (1995) as a means to enhance control. In this process, the movement of people across organisational divisions facilitates the sharing of knowledge and best practice and helps to build a culture of shared values. In this study, there is evidence of socialisation but not to the extent found in Bradach's study. Within the sample chains, socialisation takes place within OLM and master franchise divisions to a greater extent, as Table 3 reveals. However, socialisation as a plural process is evident only between OLM and master franchise divisions. This plural process is stimulated by the greater degrees of formal and informal communication between these divisions especially as inter-firm agreements evolve. Communication, in turn, serves to enhance the trust between the different firms and their members, a finding consistent with Mitronen & Moller's (2003). As one informant explained, 'trust is only built because you get to know the people and you understand their reaction so you know how to go about building the relationship'. Another informant added 'the more open a relationship, the more trust you generate.' Norms of behaviour that reflect an inter-firm culture emerge as a bi-product of this trust and enhance the degree of control achieved. For example, informal practices emerged within the sample for dealing with potentially contentious issues. As one informant commented, 'it would be injudicious' to try and deal with the issues in any other way as that would be not be deemed to be acceptable practice.

Table 3
Organisation Design Differences in Plural Lodging Chains

Division	Organisation Structure	Decision Making, Control and Coordination Processes Employed
OLM (owned, leased and managed)	<ul style="list-style-type: none"> • Mechanistic • Hierarchical 	<ul style="list-style-type: none"> • Decision-making is centralised • Extensive use of control mechanisms with heavy reliance on diagnostic systems and feedback mechanisms • High levels of formalisation to achieve quality control • Varied coordination processes used (e.g. task forces, committees, conferences, meetings, management transfers), especially within more international chains • Communication is frequent, formal and informal, and multi-directional • Coordination and communication processes could increase flexibility achieved but mechanistic structures serve to limit flexibility
Franchise	<ul style="list-style-type: none"> • Mechanistic • Hierarchical with greater spans of control than OLM 	<ul style="list-style-type: none"> • Decision making is centralised for strategic decisions concerning the 'brand', but decentralised for operational decisions • Focus of control is on output, financial and quality • Heavy reliance on diagnostic systems and administrative control procedures to monitor technical aspects of quality • Contractual controls also used to control output • Less use of coordination mechanisms than OLM; more reliance on formal control procedures • Communication is dominated by formal reporting structures • Relatively less informal communication than in OLM portfolios
Master Franchise	<ul style="list-style-type: none"> • Organic and evolutionary • Change driven by interaction between firms 	<ul style="list-style-type: none"> • Decision making is decentralised • Use of diagnostic systems for output control but these devolved to master franchisee level except for development targets • Trust and corporate culture emerge as control mechanisms • Extensive use of coordination mechanisms (e.g. task forces, functional committees, inter-firm training, conferences, management transfers, interlocking directorates) within and across firms • Communication is frequent, formal and informal within and across firms and increases throughout lower organisational levels as inter-firm agreements evolve

Plural benefit three: flexibility

The third benefit associated with the plural form is that of flexibility, or the ability to adapt to changing market conditions. The plural form is purported to increase flexibility achieved through franchisees, as they are often perceived to be more responsive to customer demands. According to Bradach (1995) however, franchisee autonomy is balanced in the plural form through the expertise of the corporate office and company-owned units through the plural process of mutual learning. In this process, franchisees are a source of new products or innovations, which are then tested for feasibility by corporate office. In this way the plural form enhances flexibility as well as systemwide adaptation. However, there is mixed evidence of the mutual learning process in this study. There were no organisational processes identified in this study to record or test the new product or process ideas from franchisees and thus no evidence of mutual learning between OLM and franchised portfolios. In fact, informants reported a distinct lack of interest in franchisee innovations or best practice and this appears to be a result of the control processes employed. As one informant explained, control is shaped by ‘a different set of drivers’ for franchised properties and they do not consider whether ‘we are really making the most of this hotel’s location? Are we really making the departments run effectively?’ It was recognised however that this approach may result in some potentially good ideas being missed.

Mutual learning is also inhibited by the limited coordination and communication processes employed between the OLM and franchise divisions. One informant explained, ‘we don’t pick up the phone to them, to franchisees, absolutely not’ and another described the situation as one where ‘franchisees are definitely on the other side of the wall’. These statements reflect the perceptual barriers that are created through the design differences between OLM and franchises division, which were reported to be ‘separate’ and ‘not pushed together particularly well’. OLM members frequently perceived franchisees as the ‘poor cousins’ who offered inferior quality and were not considered trustworthy. These findings give weight to Cliquet’s (2000) argument of the relevance of symbiosis or manager’ mindsets in plural forms.

It is only between the OLM portfolios and the master franchise divisions that there is evidence of mutual learning. Informants identified a number of examples where different marketing and human resource initiatives were adopted as a result of a mutual learning process. Coordination processes and communication practices across these divisions were seen as providing opportunities to ‘share success and best practice’ to enable this plural process to emerge. One informant advised that this required managers to ‘listen with the intent to understand’ not with the ‘intent to reply’. As a result, decision-making processes began to involve ‘healthy debate’ and ‘a very good exchange of information’. Informants reported that this approach led to the development of initiatives that were more ‘global in their orientation’ as they incorporated the ‘grass root experiences from multiple markets’. However, it also led to the flexibility for master franchisees to adapt initiatives to better reflect the demands of their different markets. Informants were quick to point out however, that this approach could potentially open up ‘anarchy and chaos’ without ‘trust in the relationship’, further proof of the role of trust and the relevance of management mindsets in the plural form.

CONCLUSIONS

This study has increased our understanding of the plural form model by exploring the research questions posed. It is clear that a more diverse mix of entry modes creates complexity in the management of international lodging chains. While there is evidence of plural processes emerging between two designs this was not extended across all designs identified in this study. The control and coordination processes within the different designs were not always conducive to the development of the plural processes of modelling and ratcheting. In addition, they served to produce distinctions between the different designs and create perceptual barriers between divisional members. While growth benefits are realised through additive processes, this study provides mixed evidence of the achievement of other benefits of the plural form. The relevance of ratcheting in international chains is questionable, as performance comparison may be meaningless across different markets. Benefits of control and flexibility were only apparent across OLM and master franchised divisions. These designs are more organic in nature and a degree of trust emerges between divisional members enhancing the degree of control and flexibility achieved. The plural form model therefore appears to be of partial relevance to international lodging chains and its potential benefits only partially realised.

This research is not without limitations. The use of a single industry case study strategy has implications for the generalisability of our findings. In addition, this study has investigated international lodging chains only

from a plural form perspective and research using network analysis may yield further insight into the management of these complex organisational forms. Given the limited research into modal management, however, this study does make a contribution to our understanding of complex organisational issues in plural forms. Furthermore, it highlights a number of implications for managers of international lodging chains. Managers of plural chains, particularly mature chains, should consider where distinct designs have been developed and the impact this is having on organisational performance. In particular, if there are design and perceptual barriers present, managers should consider how coordination and communication processes could be used to build bridges between organisational designs to facilitate the development of plural processes where appropriate. In addition, managers should consider if control processes used are serving to inhibit the development of plural processes, like mutual learning, even where coordination processes are used across organisation designs. Without these considerations, there may be a danger of focusing on market leadership, as Cliquet and Croizean (2002) report, but at the expense of organisational performance. Bradach's (1995) work remains seminal and further exploration of modal management is to be encouraged especially given the continued internationalisation within the lodging industry using asset light models.

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**ANALYSIS OF OUTCOME ASSESSMENT MEASURING STUDENT SHARED EXPERIENCE IN KEY
INDUSTRY SKILLS AND ABILITIES**

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ABSTRACT

The purpose of this paper is to discuss the use and findings of an outcome assessment survey that measures students' shared experiences and the effectiveness of a restaurant operations laboratory in providing exposure to the top shared skills and abilities; leadership, controlling costs, positive guest relations, managing crisis situations, and effective oral communication as reported by industry executives. This measure to what degree students who have completed the laboratory experience achieved the learning outcomes that were developed as a result of the success indicators. Overall, 94 percent of 127 students felt their exposure was adequate to outstanding.

Key Words: outcome assessment, success indicators, hospitality education, shared experience, skills and abilities.

INTRODUCTION

A la carte fine dining has long been recognized as a core component in hospitality education curriculum (Gustafson, Love, and Montgomery, 2005). Within the United States there are 114 four-year baccalaureate hospitality programs which offer restaurant and foodservice management as a part of their curricula (Guide to College, 2004). Of the 114 institutions, 53 offer foodservice laboratories in various forms, such as cafeterias, banquet style themed meal period, casual limited menu and fine dining restaurants. There are 18 institutions that offer restaurant laboratories that are designed solely for the purpose of hospitality education without any commercial interface. This study was done at a Southern California polytechnic university that has one such laboratory.

This paper will discuss findings of an outcomes assessment survey which measures students' shared experiences in the operation of a restaurant laboratory course and measures students' mastery of the knowledge, skills and abilities found to be significant for future success in the hospitality industry. Additionally, the paper will make recommendations to the 114 four-year baccalaureate hospitality programs in the United States can develop a reliable scale in evaluating learning outcomes for similar course settings.

According to a study by Nelson and Dopson (2001), the top management skills and abilities, as identified by hospitality professionals, are:

1. Demonstrating leadership abilities,
2. Controlling costs effectively,
3. Managing crisis situations,
4. Developing positive customer relations,
5. Identifying and solve managerial problem.

Based on Nelson and Dopson's findings, the food and beverage faculty in this study revised the restaurant operation laboratory course outcomes to implement strategies and actions designed to meet or exceed objectives supporting the overarching goals of a hospitality operation. The revised outcomes are as follows:

1. Demonstrate principles of hospitality in a food and beverage operation.
2. Demonstrate effective leadership qualities related to communication, team performance, decision-making, and hospitality ethics.

3. Implement, demonstrate, and evaluate Standard Operating Procedures in a hospitality system; compare operational results with operational objectives; assess variances and synthesize recommendations.
4. Demonstrate the ability to organize system and sub-system data into pertinent financial and non-financial reports, analyze data, interpret meaning from the analyses, and synthesize recommendations.
5. Develop positive guest relations by proper application of food and beverage service standards.
6. Show operational effectiveness by implementing and maintaining proper restaurant kitchen and banquet kitchen production and protocol.

Realigning the food and beverage operation practicum laboratory course outcomes provided faculty with standards that measure the academic effectiveness of this particular course. Analysis of the outcomes, using a scale developed in response to Nelson and Dopson's research, provides insight in teaching hospitality management students the knowledge, skills and abilities needed to manage in today's industry environment.

The analysis shows that the outcomes assessment tool efficiently measures stated outcomes and their effectiveness in the application of knowledge. The scale was developed to be flexible, and is easily modified for adaptation to other institutions' curriculum evaluation of learning outcomes in similar course settings.

REVIEW OF LITERATURE

There is a great volume of literature regarding areas of general hospitality education, curriculum, and outcomes assessment. There is not the breadth of formal discussion on implementation specifically regarding student operated restaurant laboratories. The literature review discusses the few articles that were pertinent to the study conducted, and addresses the current state of foodservice outcomes assessment tools. All of the educational theories below use a platform to validate outcomes and educational performance.

The hospitality field continues to evolve from a vocational necessity, to a recognized academic discipline. Early theorists of hospitality education believed that lessons to be implemented during the next week of class should be introduced during the previous week's class (Evans, 1988). The *implementation theory* eventually lost favor and was replaced by a shift towards the liberalization of education. The curriculum theory shift was based on the need for a broader base of knowledge and shared experience by students (Morrison & O'Mahony, 2003). The implementation model of hospitality education was replaced with Kolb's *experiential learning model*. Kolb's (1984) experiential learning model, which is very similar to Bloom's (1956) taxonomy, was based on the theory that students move through learning stages; from concrete experience, reflective observation, abstract conceptualization and ending with active experimentation (Kolb, 1984). Part of Kolb's learning theory emphasizes the need for a "...shared student experience" (Kolb, 1984). Part of the shared student experience is found in the theory outlined by LeBruto and Murray (1994) in their discussion of the hospitality education theory of learning through the experience of using a "captive hotel". Restaurant operation laboratories are similar in nature to a "captive hotel", as they replicate the activity of a commercial operation in a controlled laboratory setting which provides the "live experience that helps prepare students for managerial positions" (Kay & Russette, 2000).

Journal articles regarding outcomes assessment number in the hundreds, only a few addressing the unique circumstances found in the operation of a fully operational, student run restaurant / laboratory serving the general public. In order to better analyze the unique nature of a restaurant laboratory, it was necessary develop a reliable scale in evaluating learning outcomes. The outcomes assessment objectives developed by the food and beverage faculty is adaptable and can be used to evaluate learning outcomes for similar course settings in the 53 institutions that offer foodservice laboratory settings.

METHODOLOGY

The purpose of this survey was to measure the level of exposure of students enrolled in the food and beverage operations practicum laboratory to the top industry skills and abilities during the students' week in managing the restaurant laboratory. Exposure is defined as the amount of time and participation of activity in each of five key indicators. A pilot study was administered to all 26 students of one section of the restaurant laboratory. A secondary survey was sent to the 36 faculty, staff and administration of the hospitality school. The modifications were in verbiage and clarification of the scalar descriptors. The final online survey was administered via SurveyMonkey to eight classes of the restaurant laboratory consisting of a total of 218 students. There was no incentive given to students for completing the survey. A follow up e-mail was sent to all 218 students thanking those

who did complete the survey and to ask those who had not yet to please do so. A total of 127 (58.3% response rate) agreed to take the survey. Ninety-seven percent (76.4%) completed the survey.

The content questions were: As a student in your management role in the restaurant laboratory, how much exposure do you believe you were given in the following areas: Ability to Demonstrate Leadership, Controlling Costs Effectively, Managing Crisis Situations in the Hospitality Workplace, Developing Positive Guest Relationships and Demonstrate Effective Oral Communication Skills. (Nelson & Dopson, 2001) The scale was rated Outstanding =1, Above Adequate = 2, Adequate = 3, Below Adequate =4, Minimally Adequate = 5 and Not Covered = 6. The six-point scale was used so there was no middle or neutral choice. There was a descriptive question following each skill or ability to give the student an opportunity to explain his or her experience. There was an open question asking “In the restaurant laboratory, what did you find most applicable to the reality of the work place in the hospitality industry?” The last question on the survey asked, “If they could change anything in restaurant laboratory, what would it be?”.

RESULTS

The response in Table 1 shows that the students were employed at the time in the segment of the industry they intended to pursue as a career in Table 2. This is consistent with a recent study in career preferences by Chung, Goh, Stout & Dellman-Jenkins (2007). There is correlation between the known specific realities of each different segment of the industry and the students’ expectations when the student is working in the specific segment while attending college (Self, 2005). This may have influenced the high percentages of exposure to the skills and abilities being measured, as the students not only were learning and practicing them in the laboratory setting, but also in the workplace. Table 3 breaks down the actual percentage that the students believed they received while in the laboratory. This understanding that these skills and abilities are vital to the success of their career is important to gaining a solid foundation to enter the workplace. There is a tri-fold dimension of what is expected in the industry as a manager that is practiced in the laboratory, which is consistent with what the student experiences in their day-to-day current employment situation.

Table 1
Current Student Employed N=97

Hotel/Resort	Club	Restaurant	Culinary	Other	Not Employed
23.7%	4.1%	30.9%	0.0%	15.4%	25.8%

Other n=11 was noted as retail, pet hotel, hair salon, university employment.

Table 2
Area of Interest After Graduation N= 97

Hotel	Food and Beverage	Club Management	Beverage Management	Culinary	Other	None
34.0%	35.1%	5.2%	5.2%	6.2%	12.4%	2.1%

Other n=12 was noted as event management and human resources.

Table 3
Exposure Ranking of Skills and Abilities N= 97

	Leadership	Controlling Costs	Crisis Situations	Positive Guest Relations	Effective Oral Communication
Outstanding	45.4%	11.3%	33.0%	43.3%	47.4%
Above Adequate	35.1%	27.8%	38.1%	34.0%	37.1%
Adequate	16.5%	38.1%	22.7%	21.7%	15.5%
Below Adequate	3.1%	20.6%	5.2%	1.0%	0.0%
Minimally Adequate	0.0%	2.1%	1.0%	0.0%	0.0%
Not Covered	0.0%	0.0%	0.0%	0.0%	0.0%

DISCUSSION AND FINDINGS

In the findings of Lee & Kamp (2005), active participation garnered higher levels of learning in upper-level students. The students in this study were upper level juniors and seniors. An open ended descriptive question asked after each of the 5 top indicators gave insight as to the student's mindset.

Forty five percent of the students felt they had outstanding exposure to leadership in the course. They had the opportunity to demonstrate leadership skills in the lab while managing the restaurant and to demonstrate leadership even when they weren't managers for the week. It allowed the students who perhaps would second-guess their capabilities really to rise to the occasion. On the lower end of the scale 3.1% believed they had below adequate exposure. They felt that even though all students received a chance to be a manager for a week, it was slightly difficult to demonstrate leadership because some people had stronger voices and so dominated even if it wasn't their week. The students are given guidelines, instruction and parameters on how to manage the restaurant operation lab. To manage peers is difficult at best. To lead peers is a skill level that is achieved by normally few. It is the task of the instruction team to inspire and empower the students to test their leadership abilities.

In the area of controlling costs, 38.1% believed they had adequate exposure. Students felt that even though they were given a budget, it was not effectively enforced. Due to their lack of experience, they did not control costs effectively. Purchasing was done by a purchasing agent therefore students did not get real life experience in controlling costs. 2.1% felt there was minimal exposure. While they had to manage their waste reports, these students complained of having no control over other costs. There are certain tools and measures in place for cost control in the laboratory. The students are taught and tested on these procedures. The students did not share the understanding or the importance. This is an area that requires work by the instruction team.

The main crisis situation this study was the very limited hours of operation and the varied level of experience of the students in the class. Thirty eight percent felt they had above adequate exposure. Thirty three percent felt they had outstanding exposure. Only 1% felt they had minimally adequate exposure. Students reported that in the 2.5 hours of operation no matter how much prepared they were, there were situations that could not be anticipated. The first day in each position led to a varied measure of crisis. The lack of preparation the student was and how much of a lack of understanding of the new position led to crisis. Students reported that the instructors had raised questions as to find the proper procedure in resolving issues. This gave them the opportunity to think about specific solution sets, and then to solve them based on their evaluation of the situation.

In the area of positive guest relations 43.3% of the students felt they had outstanding exposure. The course provided a chance for students to develop good relationships with the guests by table touching. It was reported they had constant guest contact, being able to talk to guests in several different positions throughout the quarter. They were able to develop people skills and learn customer service techniques. Only 1% felt they had below adequate exposure. This may have been due to a long rotation in the kitchen area.

The highest ranking was in exposure to effective oral communication, 47.4%. Verbal communication with guests, instructors, peers and giving presentations created excellent effective oral communication skills. Students learned that communication needed to take place on every level and could change depending on whom they were talking to. Communication is a key in this industry. As in all food service operations, failure to communicate any pertinent information results in the loss of patronage and reputation. Students realized that this is an industry of such diverse demographics that it is essential to be able to communicate properly, also to exercise patience and good listening skills.

There were two descriptive questions of general interest to the investigator. First was what did you find most applicable to the reality of the work place in the hospitality industry. Ninety-seven percent answered this question. Selected answers were:

- “(Student) Managers are held accountable for problems that may arise and responsible for the outcome & follow through.”
- “Teamwork and analysis project”
- “Managers vs. employees”
- “For me, everything was equally important and applicable.”

The second question was asked specifically in regards to students' suggestions to changes in the laboratory. Ninety-even percent answered this question. Selected answers were:

- "Longer management periods because you can not learn enough in one week"
- "The managers would be able to handle the spending amounts and percentage of staff wages and salary. This was something I was unable to answer during one of my job interviews"
- "This class to be optional"
- "More training time, different types of training."

LIMITATIONS

Limitations of the study were mainly due to this being a convenience sample; students surveyed were only one section of the laboratory. There are two sections, one lunch and one dinner. This was only administered to the lunch class. There were no gender or ethnicity demographics. In area of effective oral communication, would English as a second language make a significant difference. No alumni were surveyed to see what was experienced as a student is reality in industry.

CONCLUSION AND RECOMMENDATIONS FOR FURTHER STUDY

Hospitality education curriculum is driven by industry needs. It is hospitality education's duty to provide a well-trained workforce to meet the future demands of a dynamic industry (Chathoth & Sharma, 2004). With shrinking resources and, advancing technology, it is critical for hospitality education programs to work effectively, providing contemporary knowledge applicable to a changing industry. Through the use of reliable outcomes assessment tools that are flexible and adaptable to a variety of curricula, it is possible to analyze the five skills and abilities to see if learning has taken place. The importance of the shared student experience is an integral part of the outcomes assessment, as peer teaching/learning is highlighted as a trait essential for industry success. This research is usable in other courses in this type of environment. In a series of classes that build to the student-run operation, there could be beginning courses that teach basic instruction and others that would analyze the actual daily, weekly and quarterly data. Using Bloom's (1956) Taxonomy, faculty can take these five top skills and abilities and craft appropriate objectives for each course level.

Areas for future study include these questions:

- Do "The five skills and abilities" change over time in response to a changing business climate?
- How is the commitment of a university/college measured regarding a hospitality education program if it changes (lowers) the expected outcomes? (based on financial, administrative, and faculty/staffing support).
- How does a restaurant laboratory course add to the perceived "value" of an institution?
- Does gender and ethnicity have a significant difference on the outcomes?
- Do the students that feel they have received high exposure to these skills and abilities have a longer employment commitment to the industry?

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A MODEL FOR A SUCCESSFUL HOSPITALITY EXPATRIATE EXECUTIVES' ASSIGNMENT

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ABSTRACT

This study was conducted to determine the different components in order for hospitality expatriate executives to have a successful overseas assignment. Exploratory factor analysis generated three components of a model for a successful hospitality expatriate assignment. These three components or factors were personal competencies, global management skills, and expatriate adjustment. The findings of this study suggested that the success of an overseas assignment was determined by personal competencies, global management skills and expatriate adjustment. However, it was not verified which of these factors would influence successful expatriate assignment.

Key Words: Expatriates; Hospitality; Human Resources; Model; Employee Selection; Globalization

INTRODUCTION

A competent expatriate hotel manager is critical to any hospitality firm's success (Gorchels, Jambulingan, & Aurand, 1999). Expatriates often have detailed knowledge of the managerial systems used by a company and have an important part to play in the solidity of an organization's corporate culture in distant locations (Barber & Pittaway, 2000). A major driving force behind the expansion and utilization of expatriates is the growing demand for labor in the international hospitality industry combined with a major labor shortage in some Asian countries (Barber & Pittaway, 2000; Burns, 1997). The predicted employment requirements of the international hospitality industry are quite staggering and are forecasted to rise from 255 million in 1996 to 385 million by 2006 (The Economist, 1997; Barber & Pittaway, 2000). Expatriates were required to support this growth at many operational and managerial levels. The management of expatriate labor in the future became more important to hotel companies and would cover many aspects of hotel labor as well as managerial and professional positions (Barber & Pittaway, 2000).

Why use expatriates instead of host-country managers and/or domestically-based international managers? According to Barber and Pittaway (2000), expatriates running foreign operations are more likely to be familiar with the corporate culture and control systems of headquarters than are host-country managers, which results in more

effective communication and coordination with the corporation. Second, expatriates provide managerial talent in developing countries where there is limited local talent. Third, the use of expatriates enhances the global mind-set of the organization. Expatriates are also a better option than domestic international managers when short-term international visits are insufficient for successfully growing a business in the target country.

However, there is also a downside to using expatriates. Expatriates return prematurely from foreign assignments. A survey by Employee Benefit Plan Review (2001) suggests that 20% of expatriates return home early. In comparison, Birdseye and Hill (1995) estimated early return rates of American expatriates at 16 – 40%, while Shay and Tracey (1997) estimate a 70% return rate for expatriates sent to undeveloped countries. Expatriate failure rates have been estimated at 16-40% (Shaffer, Harrison, & Gilley, 1999), 20-40% (Solomon, 1996), and 30-50% (Black, Mendenhall, & Oddou, 1991).

The average estimated monetary cost of an expatriate failure is placed at anywhere from \$200,000 to \$1.2 million (Solomon, 1996; Swaak, 1995). In addition to monetary costs, failed expatriate efforts can also lead to negative organizational outcomes such as delayed productivity, poor relationships with local nationals, negative perceptions of the company, difficulty for expatriate successors, and ineffective repatriation (Graf & Harland, 2005; Bennett, Aston & Colquhoun, 2000). Failed expatriate assignments can result in direct financial loss to a firm ranging from approximately UK £175,000 to UK £350,000 depending upon the country or region of the world, damaged relationships with the host country, lost business opportunities, as well as damaged career paths for individuals who probably should not have been sent overseas (Mervosh & McClenahan, 1997; McGrath-Champ & Yang, 2002).

Lack of adequate processes for selection and training expatriate managers was considered to be the major cause of expatriate failures (Tung, 1981 & 1987; Porter & Tansky, 1999; McGrath-Champ & Yang, 2002). Thus, this study revealed the factors that determine a successful hospitality expatriate assignment. The purpose of this study was to establish a model for a successful hospitality expatriate executives' overseas assignment. Specifically, the study would determine the components of a model for a successful hospitality expatriate executives' overseas assignment?

REVIEW OF LITERATURE

This generation had entered the Global Age. More and more people are global, they shared many global values and practices, and a huge number of individuals worked for global organizations. Globalization caused a converging of economic and social forces, of interests and commitments, of values and tastes, of challenges and opportunities. One can easily communicate with people 10,000 miles away because of a shared global language (English) and a global medium for communications such as computers and the Internet (Black, Gregersen, Mendenhall, & Stroh, 1999). It has been argued by many scholars and business observers that people – not plans, systems, or strategies – were the key to obtaining a global competitive advantage for a company in any given industry (Mendenhall, 2001). What skill sets or competencies make up the repertoire of an expatriate executive? The following list were the determinants of expatriate adjustment from the research literature: self-efficacy, resilience, behavioral flexibility, curiosity, extroversion, broad category width, flexible attributes, open-mindedness, high tolerance for ambiguity, empathy/respect for others, non-verbal communication, relationship skills, willingness to communication, spouse adjustment, family adjustment, social/logistical support, culture novelty, organization culture novelty, role conflict, role novelty, role discretion, goal orientation, technical competence, reinforcement substitution, and stress reduction program (Mendenhall, 2001). These skill sets or competencies influenced expatriate adjustment which correlated to success in international assignments. The field of expatriate adjustment was well developed and the majority of scholars in this field would agree that each of the variables listed has been empirically or theoretically demonstrated to positively influence expatriate adjustment (Mendenhall, 2001; Black et al., 1999; Stahl, 1998b).

The Expatriate Executive

Expatriates are defined as the non-citizens of the countries where they work (Daniels and Radebaugh, 1993). Frith (1981) defined an expatriate as one who works for a company in an overseas location for a contracted period of time, usually an excess of one year (Li, 1995). Simply put, expatriate executives are those who do global work. With so many kinds of global work, again depending on the mix of business and cultural crossings involved, there is clearly no one type of global executive. Executives, as well as positions, are more or less global depending

upon the roles they play, their responsibilities, what they must get done, and the extent to which they cross borders (Schwandt & Marquardt, 2000). All global executives must have the ability to create trusting relationships across boundaries, to do so quickly, and to maintain them (Dotlich & Noel, 1998). Therefore, an expatriate is any individual who works outside their country of birth but does not immigrate to the country where they work. This included staff employed across all aspects of a hotel's operation and all work roles (Barber & Pittaway, 2000).

As the world economy became more globalized, the labor forces worldwide became more mobile. To develop a management cadre with a global perspective and a familiarity with the company's interests in overseas operation (Li, 1995; Deresky, 1994), multinational firms are using expatriate managers to fill overseas managerial positions. As the need of international management grows, the use of expatriates to run foreign operations is increasing as well (Scullion, 1991). Daniels and Radebaugh (1994) summarized the three major reasons for using expatriates: 1) technical competence; 2) management development; and 3) control. The need for technical competence is reflected in the tendency for companies to use expatriates in countries where management talents are not available. The second reason for using expatriates is for the purpose of management development. Expatriation is part of the career development process since multinational experience can reinforce the international perspectives of upward moving managers. It can also enhance manager's ability to work in a variety of social systems and is therefore considered valuable training for ultimate corporate responsibility (Schwandt & Marquardt, 2000). The third reason for using expatriate executives is to have close control of foreign operations. Expatriates are considered to be more familiar with the corporate culture of a company, which results in more effective communications and coordination. Therefore, as companies are developing international expansion strategies, the need to use more expatriates for control purposes grows (Daniel & Radebaugh, 1994).

Despite the important role that the expatriate managers can play, many executives have not realized their potential contributions and have a narrow and myopic view of how they can be used and who should be involved with them (Black, Gregersen & Mendenhall, 1992). Historically, firms have sent managers and professionals overseas to fill positions on a seemingly ad hoc basis; they have paid little attention either to their selection and training or to the role they could play in the overall organization (Boyacigiller, 1990). This approach created inherent problems. Individuals sent overseas without adequate training often failed, which incurs substantial costs to these companies (Li, 1995). In the hospitality industry, expatriate management is becoming very crucial as more hotel chains are now seeking expansion into overseas markets. Ruddy (1991) conducted a study on career development of general managers in Pacific Asia and found that 68% of hotel managers were from Europe and North America. As the need for international management in hospitality grows, the use of expatriates to run foreign operations is increasing as well (Li, 1995; Scullion, 1991). However, despite the important role that expatriate managers can play, many executives have paid little attention either to their selection and training or the role they could play in the overall organization (Li, 1995; Boyacigiller, 1990). Expatriates sent overseas without adequate training often can not adjust to the work life overseas which could affect the management of the business.

Based from the literature the following elements were selected as attributes that could influence the success of an expatriate's assignment overseas: *Improved Selection Criteria*: The person has technical, managerial, or other expertise sufficient to provide his or her credibility; understands a variety of foreign business systems; coordinates the budgeting process between foreign operations and headquarters; resilient, resourceful, optimistic, and energetic; honesty and integrity; emotional stability; adaptability to new environment settings; stable personal life – the person has developed and maintains stress-resistant personal arrangements, usually family, that support a commitment to work; ability to acknowledge, balance and work with cultural differences; orientation towards time; demonstrates cultural empathy.

Expatriate Adjustment: Able to deal with complexity – the person considers many variables in solving a problem; is comfortable with ambiguity and patient in evolving issues; can make decisions in the face of uncertainty; can see patterns and connections; and is willing to take risks; resilient, resourceful, optimistic, and energetic – the person responds to challenge; is not discouraged by adversity; is self-reliant and creative; sees the positive side of things; has a high level of physical and emotional energy; is able to deal with stress; technical competence; open-minded and flexible in thought and tactics – the person is able to live and work in a variety of settings with different types of people and is willing and able to listen to other people, approaches, and ideas; ability to understand why foreigners behave the way they do; awareness of own cultural background; cultural interest and sensitivity – the person respects other cultures, people, and points of view; is not arrogant or judgmental; is curious

about other people and how they live and work; is interested in differences; enjoys social competency; gets along well with others; is empathic; and language skills.

METHODOLOGY

A non-experimental descriptive or survey research design was utilized for this study. The population was the expatriate executives of hotels who represent the lodging property to the association. The lodging properties where these representatives worked were located all over the world. The sampling procedure used was cluster sampling. Cluster sampling is a probability sampling distinguished by a two-step procedure in which (1) the parent population is divided into mutually exclusive and exhaustive subsets, and (2) a random sample of subsets is selected (Churchill & Brown, 2004, p. 437). Two primary criteria used to define the respondents: that the respondents had experience working as expatriate at least once in their career and they had worked or were working in the hospitality industry regardless of title or position. Participation in this study was voluntary.

A Web-based questionnaire was developed by the researcher. The information in the questionnaire was based upon the literature and personal interviews. After collating the important attributes and variables from the literature, the researcher interviewed two (one retired and one active expatriate in a hotel facility in the southeastern part of United States) expatriates to confirm the accuracy and truthfulness of the information as indicated from the literature. Both scrutinized the list of the attributes, skills and cross cultural training activities and they confirmed that the lists represented the attributes, management skills and training programs they believed to be related to the successful assignment of an expatriate executive. Their feedback was relayed by word of mouth and via an electronic mail message. Cronbach Alpha was the reliability measure used to estimate the degree to which the items on a measure are representative of the domain of the construct being measured. Multiple authors (Babbie, Halley & Zaino, 2000; Nunnally, 1978) have indicated 0.70 to be an acceptable reliability coefficient for social sciences research but lower thresholds were sometimes used in the literature. The coefficient Alpha on the hospitality executives' attributes yielded a high reliability estimate of .958 with 28 items.

FINDINGS

Ninety-seven percent of the respondents had prior overseas experience or they had experience working outside of their home countries. Only 3% did not provide an answer. The number of months the respondents worked as an expatriate executive in the host country varied. Sixteen percent (16%) worked for less than six months; eight percent (8%) worked for 7 to 12 months; another eight percent (8%) worked for 13 to 14 months; ten percent (10%) worked for 25 to 36 months; none of the respondents worked between the 37 to 48 months; eight percent worked for 49 to 60 months; another eight percent worked for 61 months and beyond; and eight percent did not provide any answer regarding the number of months they worked as expatriates.

Regarding the job title, two percent (2%) of the respondents served as consultant, twenty seven percent (27%) were directors or managers, five percent were educators and twenty eight percent (28%) were top executives. In terms of the number of months of hospitality experience the respondents had, seven percent (7%) just worked for less than six months; five percent (5%) worked at most twenty four months; six percent (6%) worked in the industry between 25 to 36 months; three percent (3%) were in the hospitality industry for four years (37–48 months); six percent (6%) were involved in the hospitality industry for sixty months and below; and an overwhelming 73% of the respondents had been with the hospitality industry for more than sixty one months.

These respondents had worked in different departments of the hospitality industry. Six percent (6%) were assigned in the personnel department; nine percent were detailed in marketing or sales; twelve percent (12%) were responsible of the food and beverage department; fifteen percent (15%) were delegated in the general management area; few (6%) were appointed in the front office; and some (8%) were delegated for financial control. The largest percentage (22%) of the respondents served in other departments of their property which included human resources, training, event management, and research and development. The information on other departments was provided by the respondents in an open-ended question, *question number 11 other*.

The respondents worked in different hotel categories. Six percent (6%) were in a mid priced property; twenty one percent (21%) managed a boutique hotel and thirty nine percent (39%) worked in a luxury hotel property. One third (33%) of the respondents did not indicate the category of the property where they worked. The level of the self-reported success of the respondents' overseas experience differed. For this particular question, four scales were

used: 1= not successful, 2= somewhat successful, 3=successful and 4=extremely successful. Three percent (3%) were not successful; fifteen percent (15%) were somewhat successful; forty six percent (46%) were successful and twenty four percent (24) were extremely successful. In general, the expatriate executives indicated that they viewed themselves as being successful in their assignments to the host country (mean=3.03, successful).

Table 1
Frequency Distribution of the Professional Background of the Respondents

Variables	Mean	Frequency	Percent
Overseas experience prior to present job	2.00		
Yes		64	97.0
Missing/No Answer		2	3.0
Number of months as an expatriate executive in the host country	3.45		
Less than 6 months		16	24.2
7-12 months		8	12.1
13-24 months		8	12.1
25-36 months		10	15.2
37-48 months		0	0.0
49-60 months		8	12.1
61 months and above		8	12.1
Missing/No Answer		8	12.1
Job Title	2.95		
Consultant		2	3.0
Director/Manager		27	40.9
Educator		5	7.6
Top Executive		28	42.4
Number of months of hospitality experience	6.06		
Less than 6 months		5	7.6
13-24 months		3	4.5
25-36 months		4	6.1
37-48 months		2	3.0
49-60 months		4	6.1
61 months and above		48	72.7
Department in which the respondents worked/are working	5.58		
Personnel		4	6.1
Marketing/Sales		6	9.1
Food & Beverages		8	12.1
General Management		10	15.2
Front Office		4	6.1
Financial Control		8	12.1
Other		22	33.3
Hotel category	3.50		
Mid priced Hotel		4	6.1
Boutique Hotel		14	21.2
Luxury Hotel		26	39.4
No Answer		22	33.3
Level of success as an expatriate executive	3.03		
Not Successful		2	3.0
Somewhat Successful		10	15.2
Successful		30	45.5
Extremely Successful		16	24.2
No Answer		8	12.1

Note: n = 66

The questions that load highly on factor 1 seem to all relate to different aspects of a person's competencies, therefore this factor was renamed, *personal competencies*. The questions that load highly on factor 2 all seem to relate to different aspects of global management, therefore, this factor was renamed, *global management skills*. And, finally the questions that load highly on factor 3 all contain some attributes of expatriate assignment, therefore, this factor was renamed, *expatriate adjustment*. This analysis seems to reveal that the initial questionnaire, in reality, was composed of three sub-scales: personal competencies, global management skills, and expatriate adjustment. Please refer to figure 1.

Figure 1 showed that the straight lines connecting the factors to the variables indicated that these variables were loaded onto that factor. The curve lines that connect the variables indicated that the variables correlate. There are no curve lines that connect the three factors because they are assumed to be orthogonal or not correlated.

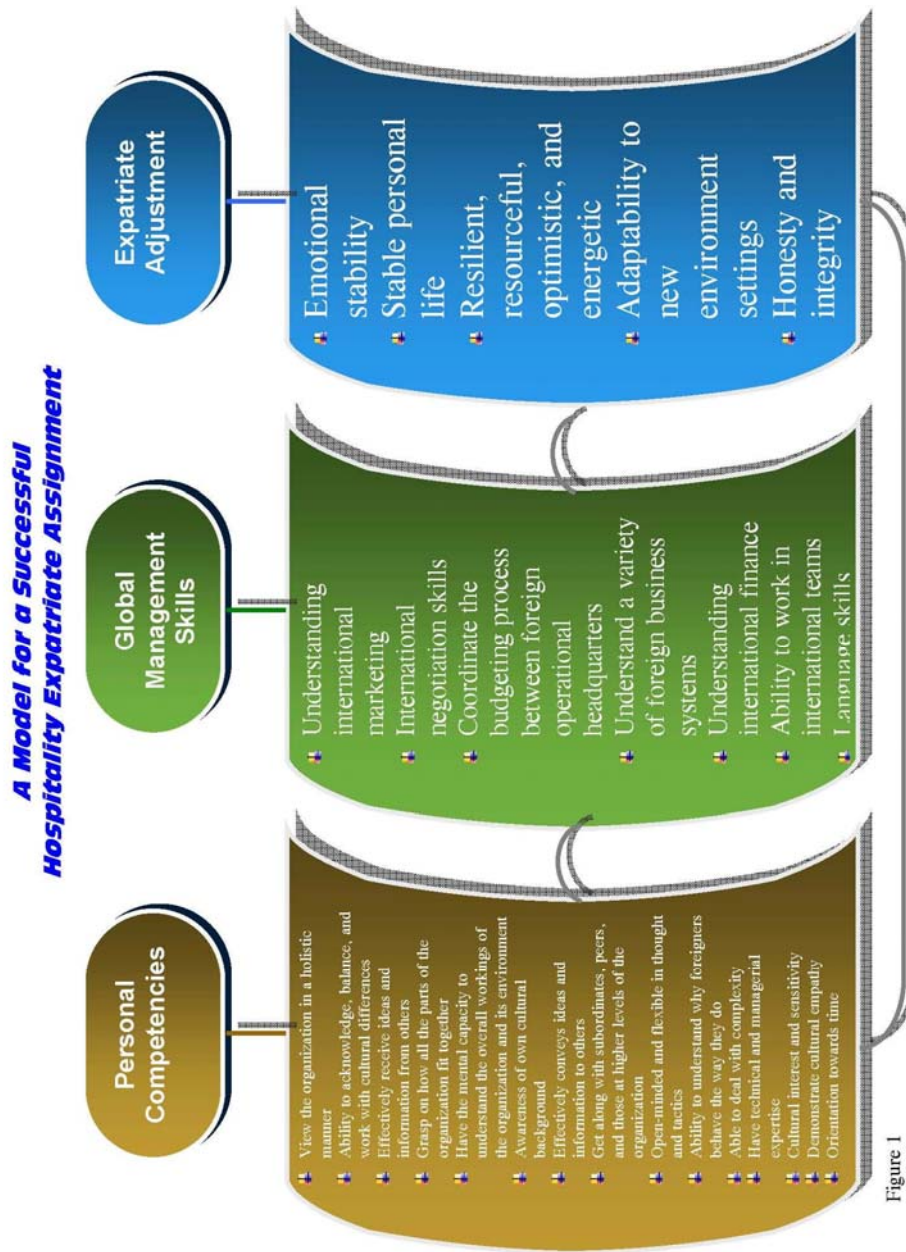


Figure 1

CONCLUSION

Senior-level executives and non-senior level managers that had experienced working at least once in their careers outside of their home country were included in this study. Respondents' email addresses were selected from the online directory of the International Hotel and Restaurant Association (IHRA). The majority of the respondents were between the ages of 51 to 60 years old, male, married and highly educated (most of them had graduate degree). They had prior overseas experience, had worked in the host country for six months and they worked in luxury hotel properties. A high percentage of no answer on the hotel category had been noted. A reason for this may be that these respondents were consultants of several hotel properties. This is evident on the high education obtained. There was a broad variation in professional backgrounds, years of international experience, and expatriate assignments across the 70 respondents. The participants included in this study derived from a broad spectrum of functional backgrounds including general managers, consultants, Human Resources generalists, marketing managers, training and development specialists, food and beverage directors, front office directors, financial controllers, event managers, and scientists. It seemed that success in international assignments can be obtained through a variety of different career paths and functional disciplines.

Exploratory factor analysis generated three components of a model for a successful hospitality expatriate assignment. These three components or factors were personal competencies, global management skills, and expatriate adjustment. The competencies mentioned above are very useful during employee selection process. Before sending an employee abroad, it is imperative to consider all the aspects of this issue. Selection is where it all starts. The success of an expatriate depends first on how well the recruitment process is completed. The overriding key to operating successfully abroad is to select the right person to assign to a particular task (Avril & Magnini, 2007). The categories of internationally-focused personal competencies identified by successful expatriate executives were consistent with research into success criteria of executives working international positions. The labels assigned to each factor appear descriptive of the factor contents and are reflective of current research into international expatriate executives' success criteria. This suggests that researchers accurately portray the field of international management as a whole. It also suggests that managers and executives are cognizant of current thinking into the success criteria involved with managing in international settings. These findings paralleled that of the information revealed by Nelson (1999). Personal competencies appear to break into three overarching categories: personal traits and attitudes; cultural awareness; and, knowledge and skill components. Getting along with subordinates, peers, and those at higher levels of the organization, open-minded and flexible in thought and tactics, and being able to deal with complexity were characteristics determined to stem from the personal traits of an individual. These traits would appear to be somewhat unique to a person's character.

As important as these personal traits appeared, a large proportion of behaviors examined through this study represent cultural awareness and knowledge and skill components that are not rooted in attitude or in personal traits. Cultural awareness includes the ability to understand why foreigners behave the way they do and awareness of own cultural background. It is very important that the executive knows his or her own culture. Knowledge and skills surrounding a particular position are more readily learned than personal traits and attitudes which suggest that managers and executives holding international positions can quickly develop some level of international savvy such as viewing the organization in a holistic manner (Nelson, 1999; Spencer & Spencer, 1993; Rothwell & Kazanas, 1992). Global management skills are obviously related to global management skills that expatriate executives should possess. Expatriate adjustment is similar to Black, Gregersen, & Mendenhall's (1992) research into expatriate success criteria where family dissatisfaction with the expatriate living situation is the number one reason for expatriate failure. This runs contrary to Nelson's (1999) study where family support was not rated highly by the respondents. Indeed, family issues are the number one concern for expatriate managers when taking an assignment and ensuring on the job effectiveness (Nelson, 1999; Adler & Bartholomew, 1992). Many managers choose not to accept an expatriate assignment because of the hardship it may cause to their personal lives and families (Tung, 1987; 1988; 1993). It appears that executives working out of the host countries rely on their family for support and that the role of the family is perceived to be as important to expatriate success.

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QUANTITY FOOD LABORATORY SET: DIFFERENCES IN STUDENT RESPONSES

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ABSTRACT

The findings reported in this paper are a follow-up to research that developed a student evaluation tool (SET) for quantity food laboratory courses. The purpose of this analysis was to gain understanding of responses to SET items and to determine whether the university attended played a role in students' responses. No significant differences were found in student responses by university which further supports the validity of the instrument.

BACKGROUND

Beginning in 2004, the researchers began a series of projects to develop and test the validity and reliability of a student evaluation tool (SET) to measure teaching effectiveness in a quantity food laboratory setting. The findings of their research have been published in several journals and conference proceedings, and the researchers have presented their findings at regional and international CHRIE conferences. The purpose of this research was to further analyze the data collected during the pilot test of the SET (Weber, Chandler, and Finley, 2006).

The development of a student evaluation tool to be used in quantity food production laboratories has been reported in the literature. The need for a specialized evaluation tool was documented as this particular type of laboratory class varies greatly from any standard university lecture course. A review of literature covered student evaluations of teaching and evaluating quantity food laboratories.

STUDENT EVALUATIONS OF TEACHING

University classes are commonly rated using different methods to ensure teaching effectiveness and course content. The most commonly used measure is the student evaluation tool (SET). These SETs are intended to provide valuable feedback to teachers and administrators. They are administered at the end of a course and evaluate only the student perceptions of effective teaching. According to Clayson (1999), SETs are used at four out of five campuses nationwide. There are questions, however, as to whether the results from SETs alone give a one-dimensional limited view of the classroom (Marsh and Roche, 1997).

Research on developing SETs for hospitality management lecture courses has been reported by Gursoy and Umbreit (2005). The authors of this study of over 25,000 students proposed that student perceptions of the teacher's organization, workload, and instructional abilities influence their perception of learning. The model explained 78% of the variance in the perception of learning.

A study by Simpson and Siguaw (2000) examined faculty perceptions of student evaluations of teaching (SET) and their problems, to ascertain faculty response to SETs and perceptions to the responses, and to consider solutions to perceived problems with SETs. The researchers used a questionnaire to collect the data from a sample of 52 respondents from 15 different states in the United States and other locations outside of the United States. The faculty agreed that there are a number of problems with SETs, including the fact that some students may use the

SETs as a way of revenge, the question of validity of the evaluation instrument, and the ability of the student to objectively evaluate faculty (Simpson and Siguaw, 2000).

McKeachie (1997), d'Apollonia and Abrami (1997), and Greenwald and Gillmore (1997), all conducted research into the validity of student ratings. These authors stated that faculty use ratings as feedback for how to improve their courses. Their conclusion claimed that student ratings are the most valid data source on teaching effectiveness. However, Marsh and Roche (1997) also stated that multidimensionality in teaching is important not only because of its obvious diagnostic utility as instructor feedback but also because it provides a more sophisticated and realistic assessment of the various aspects of teaching.

STUDENT PERCEPTIONS OF QUANTITY FOOD LABORATORIES

A study by Gilmore (1989) evaluated the quantity food production management laboratory at Iowa State University. "The focus of the study was to determine the importance of the experience to career goals and the competence in the experiences as perceived by the students and to determine if there was a relationship between the importance of and competence in the experiences" (p.30). In this laboratory setting, the students managed, prepared, and served banquet style luncheons to the public. The students who completed the course were expected to be able to understand technical procedures involved in production, distribution, and service of high quality foods in food delivery systems with varying organizational structures and objectives. At the end of the course, the students used a survey instrument to assess their perceptions of the specific experiences and perceived competence as related to career goals and their relative importance. The results showed that the students valued the same competencies that had been rated highly by professionals (Gilmore, 1989).

Another study by Gilmore and Robson (1990) evaluated the student perception of laboratory experiences in quantity food production management at Iowa State University. "The purpose of the study was to assess students' perceptions of specific experiences in the quantity food production management laboratory course and to determine if these perceptions were significantly different between students whose experiences were under a two three-hour model and a one five-hour model per week" (p. 101). The students' perceptions of experiences in areas of manager assignment, production assignment, use and care of equipment and service were assessed by a survey instrument. The results of the study showed that the students in both groups gained the same competencies and knowledge (Gilmore and Robson, 1990).

FOUR PHASE SET PROJECT

A four phase project developed a valid and reliable SET for evaluating teaching effectiveness in a quantity food laboratory taught at four-year institutions. Using a Delphi Panel, a SET with 27 criteria was developed (Chandler, Finley, Weber, and Keith, 2005). In the second phase of the project, the researchers solicited feedback from a national sample of hospitality educators regarding the relative importance and/or appropriateness of the 27 items that were developed by the Delphi panel. This survey was distributed via e-mail to 520 CHRIE members at four-year institutions (Chandler, Finley, Weber, and Keith, 2004). The third phase of the research project was to solicit feedback from hospitality management students who have completed a quantity food class at four-year institutions nationwide (Weber, Chandler, and Finley, 2005). The fourth phase of the project involved pilot testing the student evaluation instrument in quantity food laboratory settings at senior institutions nationwide during both the Fall 2005 and Spring 2006 semesters. A total of 646 students rated the performance of their respective instructors, ratings were compared to the findings reported from phase three of this project, and reliability and validity of the instrument were determined (Chandler, Weber, Finley, and Evans, 2007).

METHODOLOGY

In September 2005, the Principal Investigator established contact with the faculty of several of the leading hospitality management programs to solicit their participation in this phase of the research. Nine universities agreed to participate in the project during the Fall 2005 semester and the Spring 2006 semester. These universities were Texas Tech University, the University of Nevada at Las Vegas, California State University at Pomona, the University of South Carolina, Kansas State University, Virginia Polytechnic Institute and State University, Widener University, East Carolina University, and the University of Houston.

The survey instrument consisted of the 27 criteria which asked students to rate their instructor on the items according to a 5-point Likert scale that ranged from "never to always," or from "unacceptable to outstanding,"

according to the wording of the criteria, and with 5 being the highest rating and 1 being the lowest rating. Demographic information requested students' gender, class level, career aspiration, and grade they expected to earn in the course. Respondents were also asked to compare this evaluation instrument with the one currently being used at their university. Data analyses were conducted using SPSS (v. 15.0). The analysis explored and compared means for the 27 items of the evaluation instrument by university.

FINDINGS

A total of 646 completed SET's were included in the data analysis. The data were sorted by university with the number of students from each university determined (Table 1). Means for the 27 SET criteria were calculated for each university with the minimum and maximum mean for each of the criteria presented in Table 2. ANOVA between groups based on university was used to compare the differences in the means and there were no significant differences.

Table 1
Number and Percent of Students By University (N=646)

<i>University</i>	<i>Number</i>	<i>Percent</i>
1	71	11.0
2	25	3.9
3	95	14.7
4	49	7.6
5	36	5.6
6	78	12.1
7	76	11.8
8	84	13.0
9	132	20.4

Table 2
Range of University Means for 27 Criteria (N=646)

<i>Criteria</i>	<i>Min.</i>	<i>Max.</i>
#1 - The course outlined the skill competencies that are to be mastered and demonstrated by students.	3.52	4.36
#2 - Course challenged students to demonstrate mastery of skills and/or competencies that increase in complexity	3.38	4.40
#3 - The course included one or more instruments for objective evaluation of student performance	3.34	4.44
#4 - The instructor demonstrated appropriate hands-on skills adequately	3.83	4.77
#5 - The instructor demonstrated professional rapport	3.77	4.76
#6 - The instructor was dressed professionally for the laboratory	4.35	4.99
#7 - The instructor used appropriate terminology	4.04	4.87
#8 - The instructor maintained regular office hours to assist students as needed	3.83	4.84
#9 - The instructor demonstrated appropriate body language when communicating with students	3.95	4.75
#10 - The instructor was willing to help with questions & concerns	4.06	4.89
#11 - The instructor maintained a safe, sanitary, and organized workspace	4.15	4.92
#12 - The instructor demonstrated appropriate behaviors/skills	3.88	4.80
#13 - The instructor defined the structure and objectives of the session	3.83	4.59
#14 - The instructor ensured that appropriate materials were available	3.99	4.69
#15 - The instructor provided appropriate feedback	3.78	4.68
#16 - The instructor utilized expertise and knowledge from a variety of sources	3.93	4.79
#17 - The instructor adapted teaching methods to meet varying student needs and circumstances	3.72	4.68
#18 - The instructor used a variety of instructional methods to develop critical thinking and problem solving skills	3.48	4.41
#19 - The instructor created a positive laboratory environment	4.04	4.86
#20 - The students were actively engaged in laboratory experiences	4.10	4.64
#21 - The students were dressed professionally for the laboratory	4.07	4.81
#22 - The students modeled appropriate behaviors and skills that had been demonstrated	3.89	4.38
#23 - Students followed the policies and procedures outlined for the course	4.05	4.45
#24 - The students synthesized knowledge and applied appropriate abilities and skills	3.98	4.44

#25 - The students used the laboratory time effectively	3.88	4.44
#26 - The students demonstrated application of critical thinking skills	3.77	4.37
#27 - Students were prepared in advance with necessary readings and assignments completed	3.52	4.16

CONCLUSION AND IMPLICATIONS

The universities included in this sample range from large to small in total number of students and number of students in the hospitality program. In addition, the universities were selected from locations across the United States. The finding of no significant differences between student means for the 27 criteria supports the validity of the SET developed to evaluate teaching in a quantity food laboratory. Faculty teaching quantity food laboratories across the country should be able to implement the use of the SET knowing that it is both reliable and valid.

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MEASURING SERVICE QUALITY AND CUSTOMER SATISFACTION OF A CHAIN STEAKHOUSE IN TAIWAN

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ABSTRACT

Research studies have found that service quality has a direct impact on a company's profitability. This study empirically assessed customers' perceptions and expectations of service to measure service quality. By applying the three-column SERVQUAL instrument coupled with part of the Fishbein model, the study was able to a) analyze the service gaps existing in the service delivery process to measure service quality and customer satisfaction and b) evaluate a customer's attitude towards the service measure attributes of the same brand name restaurants in different locations. The findings offer implications to improve service quality for restaurant business.

Key Words: service quality, satisfaction, gap analysis, SERVQUAL

INTRODUCTION

Over the past two decades, the issues of service quality and customer satisfaction have occupied an important position in research for the hospitality industry. During the last ten years, various types of new steakhouses or steak-serving restaurants have been established in Taiwan. Competition becomes serious as steakhouse management seeks to maintain old customers and attract new ones at the same time through excellent service. The argument that service quality impacts business profits has long been apparent (Baker & Crompton, 2000; Zeithaml & Bitner, 2000) and thus it is asserted that the restaurants in Taiwan are no exception. Superior quality of service is one factor within the control of the hospitality industry that can crucially add value to its product and lead to customer loyalty (Lee, Barket, & Kandampully, 2003). Therefore, the concept of service quality has been the subject of many studies in a variety of service industries. Many of these research studies focused mostly on the United States, Australia, and Europe (Davidson, 2003, Lee et al., 2003; Tsang & Qu, 2000; Wong, Dean, & White, 1999). Most of these studies have investigated the service quality of the hotel business but comparably less research has focused on the restaurant industry and very few paid attention to the restaurant business in Taiwan. The primary purpose of the study is to understand a) the restaurant's service quality through customers' perceptions of service delivered, b) customers' satisfaction levels, and c) customers' assessment regarding the same brand name restaurants in different locations. Because the study was sponsored by a chain steakhouse company, the findings are expected to provide useful administrative suggestions for the company. The outcome of the research can also provide an outlook for restaurant businesses in Taiwan to comprehend their strengths and weakness on the related subject.

BACKGROUND OF THE STUDY OBJECT

The study object, the chain steakhouse in Taiwan, is owned and operated by a corporation which has different restaurant brand names across the nation providing different styles of steak-related meals targeting various groups of customers. The study-case is one of the company's branded chain steak restaurants termed *X Steakhouse* for the research at the request of the company. Under the same brand name, the steakhouse offers a unique style of standardized combo steak meal. A customer can enjoy a delicious meal package including several courses: appetizer, antipasto, salad, soup, entrée (a steak), dessert, and soft drink. Each of these courses, with the exception of the appetizer, has more than one choice for the customer to select from and therefore the customer can create his or her own series of courses for the meal. This type of steakhouse is considered an "easy, cozy, and family" dining place that fits comfortably between the styles of luxury and casual restaurants.

LITERATURE REVIEW

In today's hospitality business world, the critical measure of success lies in an organization's ability to satisfy customers through continuous excellent service (Gabbie & O'Neil, 1996). In other words, the service

provided to customers by a company directly impacts the company's profits as it is directly related with customers' perceptions of services and satisfaction, and thereby developing customer retention and loyalty (Baker & Crompton, 2000; Zeithaml & Bitner, 2000). Researchers have found that it costs a lot more to attract new customers than to retain current customers (Oliver, 1999; Rosenberg & Czepiel, 1983) and it is more likely for repeat customers to develop steadfast loyalty towards the business. However, service is a complex topic with many unique and intangible characteristics (Berry & Parasuraman, 1991). The challenge is to measure service quality through an understanding of customers' perceptions of the service provided. Service quality has been recognized as one of the key factors in determining the success of a hospitality business. Hospitality researchers have directed their attention to the relationship among customer satisfaction, repeat sales, and business profits (Getty & Getty, 2003; Tsang & Qu, 2000; Gabbie & O'Neil, 1996; Gupta & Chen, 1995). The center of complexity in understanding customers' hospitality experiences is due to the extent of customer participation in the service process (Parasuraman, Zeithaml, & Berry (PZB), 1985; Kandampully, 1997). It is important for a service business to know whether or not there is a discrepancy in service perceived and expected by the service receivers (customers). Such a discrepancy is commonly referred to as the "gap" in literature. Oliver's (1981) work perhaps is an early example that studied the gap between a customer's expectation and perception. PZB's SERVQUAL (1985) and their sequential research work in 1994 (1994a, 1994b, 1994c) perhaps were some of the most notable studies which made similar arguments to Oliver's (1981). PZB defined service quality into five dimensions, *Reliability*, *Responsiveness*, *Assurance*, *Empathy*, and *Tangibles* and revised their SERVQUAL instrument in 1988 to measure service quality by subtracting a customer's perception score of the service provider's performance from a customer's expectation score. Subsequent researchers have been adopting this equation to understand customer satisfaction as higher service quality is found resulting in higher satisfaction. Since then, SERVQUAL has been broadly applied in hospitality literature to measure the service quality (Wuest, Tas, & Emenheiser, 1996).

Despite some limitations of using SERVQUAL, sufficient empirical research studies are found to support the adoption of the instrument and confirm that SERVQUAL validly and reliably measured the quality of the service for hospitality businesses (Stevens, Knutson, & Patton, 1995; Nel & Pitt, 1993). However, it is also very important for a chain operation business to understand its customers' attitudes towards service quality and whether or not each property is delivering the same level of service quality. Unfortunately, the SERVQUAL instrument provides aggregated information about each service attribute to assess customer satisfaction but cannot assess customers' attitudes towards a different restaurant's service on its five service measure attributes at the same time. The Fishbein model (Ajzen & Fishbein, 1980), however, can account for the relationship among attitudes, beliefs, and behaviors for multiattribute attitude measurement. The model's theory is based on the assumption that one's behavior results from a cognitive process in which one systematically processes all available information. Therefore, applying the theory of reasoned action (Ajzen & Fishbein, 1980) with PZB's SERVQUAL instrument to evaluate service quality, a customer's attitude can be measured as a summary evaluation of a psychological object captured in the five attributes as good/bad, harmful/beneficial, pleasant/unpleasant, and likeable/dislikable (Ajzen & Fishbein, 2000). The adoption can help chain restaurants understand customers' attitudes towards the same branded restaurant and further measure the service qualities across different restaurants in different locations.

SERVICE GAPS IDENTIFIED FOR THE STUDY

The most important gap was the one between customers' expectations of services and their perceptions of the services actually delivered. This is the scope of the study and is also the gap addressed by PZB and other researchers. This is the Gap 1 that needs to be measured in this study. By adopting PZB's three-column format SERVQUAL, two other gaps (Gap 2 and Gap 3) are also found between each column and need to be studied. Because the research also aims to understand whether or not there is a difference in overall service qualities among chain restaurants in different locations, this possible difference is the Gap 4 for the study. In summary, the four gaps identified in the study: Gap 1: The discrepancy between "My Perception of Service Performance" and "My Expected Service Level;" Gap 2: The discrepancy between "My Perception of Service Performance" and "My Minimum Service Level;" Gap 3: The discrepancy between "My Perception of Service Performance" and "My Desired Service Level;" Gap 4: The discrepancy between the service quality evaluated by customers' attitudes on the service attributes among different locations of chain restaurants.

METHODOLOGY

As discussed, the SERVQUAL instrument (PZB, 1988) and the theory of Aizen & Fishbein (1980) are adopted to achieve the research objectives. The former is an approach for satisfaction measurement while the latter

is a technique for multiattribute attitude measurement. In implementing the SERVQUAL approach, the major part of the survey was designed based on the three-column approach and the five attributes defined in the SERVQUAL model (PZB, 1988). A “think tank” was organized and the members of the think tank met for approximately four hours and fifteen minutes to discuss and define the variables/factors for each of the five attributes defined in the SERVQUAL model (PZB, 1988). The think tank was composed of ten people from eight different restaurant locations. The think tank members were handpicked by the company’s CEO. They were all in top management positions in their restaurants with at least two years of work experience in the *X Steakhouse* operation and all once worked as a front-line server in the company’s restaurants. Based on the result of the think tank meeting, 27 variables/statements were developed and used to best describe and measure an attribute of the SERVQUAL model (Table 1). These evaluation factors were included in the first part of the survey and each factor was measured on a scale of 1 (extremely low) to 10 (extremely high). The second part of the survey was designed to evaluate the five SERVQUAL attributes for the restaurant where the customer just dined. Two questions were included in this part. A customer was first asked to give a score on the same scale (1 to 10) regarding his or her expectation from the restaurant about each attribute to directly capture the reflections on the service experience received. The second question was designed to measure the importance of the five attributes for multiattribute attitude measurement. Aggregated scale measurement was used, in which participants were requested to distribute 100 points among the five attributes based on the importance perceived. Demographic questions were asked in the last part of the survey.

Table 1
Service evaluation factors identified

Service Measure Attributes	Service Evaluation Factors
Reliability	(1) Food or service provided exactly as requested (2) Taste of food (3) Appearance of food (4) Availability of staff when needed (5) Dependable and well-trained employees
Responsiveness	(6) Quickly correct mistakes (7) Employee anticipate guests’ needs (8) Food served promptly (9) Give supports to other employees (10) Frequency of stop-by and checking
Assurance	(11) Knowledge about things asked (12) Making sure that customers feel comfortable (13) <i>Consistency of food served</i> (14) Consistency of service provided (15) Accurate check (Any human or machine errors?) (16) Accurate reservation
Empathy	(17) Warm and friendly greetings (18) Polite and courteous employees (19) Making efforts to let customers feel special (20) Reassurance on the corrected errors or mistakes
Tangibles	(21) Cleanliness of dining areas (22) Cleanliness of rest rooms (23) Suitable décor to create a comfortable dining place (24) Designs of menus (25) Comfortable seats and dining area (26) Convenient parking (27) Employees appearance (clean, neat, and appropriately dressed)

The survey was distributed using person-to-person technique to the restaurant customers of the think tank members’ eight restaurants. However, to keep up with the table turnover and maintain a smooth business operation,

the survey respondents were escorted to another room after their meals to complete the survey. A few trained employees were present in the room to provide guidelines and instructions on how to answer the survey questions. To reduce any possible bias and measurement errors of the analysis, a party of eight or more was not offered the opportunity to do the survey as the think tank members believed that a customer's opinion is likely to be swayed by other group members especially when a big group of people are dining together. Data was collected over a two-month period of time and 1543 completed questionnaires were collected. After the elimination of the unusable ones, 1048 questionnaires were included for research resulting in 67.92% response rate.

FINDINGS AND DISCUSSION, AND CONCLUSION

The key demographic profile of the survey respondents is presented in Table 2. Females like to visit the *X Steakhouse* (58.83%) more than men do. Most customers are between 35 and 45 years old (38.37%) while customers older than 55 years of age (2.91%) are unlikely to visit *X Steakhouse*. The collected and usable sample sizes from each restaurant are also exhibited in Table 2, which presents a limited variance across the sample sizes.

Table 2
Key Demographic Profile of the Survey Respondents

	<u>N</u>	<u>%</u>
<u>Gender</u>		
Male	431	41.17%
Female	617	58.83%
<u>Age</u>		
15 – 25 years	221	21.11%
Older than 25 – 35 years	402	38.37%
Older than 35 – 45 years	250	23.82%
Older than 45 – 55 years	145	13.79%
Older than 55 – 65 years	20	1.88%
Older than 65 years	11	1.03%
<u>Restaurants</u>		
	<u>Collected Samples</u>	<u>Usable Samples</u>
Restaurant 1	196	130 12.40%
Restaurant 2	182	126 12.02%
Restaurant 3	206	142 13.55%
Restaurant 4	192	136 12.98%
Restaurant 5	175	106 10.11%
Restaurant 6	198	132 12.60%
Restaurant 7	182	120 11.45%
Restaurant 8	212	156 14.89%

As mentioned, the SERVQUAL model (PZB, 1988) is adopted to measure the service quality of the restaurant. Table 3 presents the mean values of the five service measure attributes of SERVQUAL and their service evaluation factors. According to Berry & Parasuraman (1991), the desired satisfaction is the level of service the customer hopes to receive and the adequate satisfaction comes from the level of service that customers find at least acceptable. Customer satisfaction results from the interaction of levels of expectations about anticipated performance and evaluations of perceived performance (Miller, 1977). That is, the satisfaction score presented in Table 4 is calculated using perception score minus expectation score. By comparing the perception score with the overall score that indicates an adequate level of service, the score for the measure of service adequacy (MSA) can be calculated. Similarly, by comparing the perception score with the score of the customer's desired service level, the

score of the measure of service superiority (MSS) is obtained. “MSA” and “MSS” are the terms used by Berry & Parasuraman (1991) and their values can help in understanding the service gaps identified by PZB (1988, 1994).

Table 3
Mean Values of SERVQUAL Attributes and Their Evaluation Factors

Service measure attribute	Service evaluation factor	(1) Perceived service score	(2) Adequate service score	(3) Desired service score
Reliability	(1)	8.43	8.23	8.56
	(2)	9.03	8.51	8.52
	(3)	9.23	8.01	8.13
	(4)	8.20	8.30	8.55
	(5)	8.15	7.83	8.02
Responsiveness	(6)	8.56	8.16	8.32
	(7)	8.18	8.43	8.51
	(8)	7.86	8.02	8.42
	(9)	7.87	7.59	8.12
	(10)	8.16	7.50	7.50
Assurance	(11)	7.99	8.11	8.56
	(12)	8.32	8.24	8.47
	(13)	8.64	8.76	8.58
	(14)	8.13	7.80	8.20
	(15)	9.93	8.90	9.91
Empathy	(16)	9.00	9.00	9.54
	(17)	8.60	8.26	9.21
	(18)	8.40	7.92	9.03
	(19)	7.70	7.56	8.05
	(20)	7.80	7.53	8.02
Tangibles	(21)	8.43	8.22	8.91
	(22)	7.89	8.54	8.86
	(23)	8.07	8.83	8.83
	(24)	8.20	8.09	8.66
	(25)	7.86	8.81	8.58
	(26)	7.63	8.05	8.55
	(27)	8.13	8.10	8.48

(1) is the SERVQUAL column of “My Perception of Service Performance.”

(2) is the SERVQUAL column of “My Minimum Service Level.”

(3) is the SERVQUAL column of “My Desired Service Level.”

The scores in Table 4 suggests that the *X Steakhouse* overall provides a good service to its customers with room for improvement as the service performance level perceived by customers is mostly above the “minimum service level,” (i.e., adequate service) but below the level of “desired service.” The smallest service gap between the perceived and desired services presented is on the attribute *Responsiveness* indicating that the restaurant’s service is attentive and quick and almost reached the higher end of service quality. However, the customer’s perception of service quality related to attribute *Tangibles* is quite below the minimum service level accepted (i.e., not adequate) and the desired service level. The overall service satisfaction score is -1.09 which raises a flag regarding the overall service quality as the respondents are not satisfied with the service provided. However, this is a small number and the service issues should be rectifiable. *Responsiveness* ranked #5 with a negative value of .44 because the customers are concerned about the food order not being served promptly ($\mu = 7.86$) and employees do not seem to support each other during the peak business hours ($\mu = 7.87$). Based on the discussions conducted by the think tank members, a possible reason is that the restaurant usually has very good business but might be short-handed or the

employees are not well-trained due to the use of many part-time servers. The attribute *Empathy* also has a negative value (-.40) ranked #4. Two major factors causing this result are “reassurance on the corrected errors or mistakes” ($\mu = 7.80$) and “making efforts to let customers feel special” ($\mu = 7.70$). This might also be an issue related to busy business and not enough good-quality servers. Another attribute receiving a negative score is *Tangibles* (-.30). This is a surprise result to the think tank members because the company is very comfortable with the setup, decoration, and cleanness of the dining areas. The evaluation factors, such as “parking,” “comfortable seats and dining area,” and “cleanliness of rest rooms” all received a score lower than 8. According to the management’s interpretation, this result might have something to do with the location of the restaurant (in the city), small dining areas, and noises generated from good and busy business. In addition, because several courses make up the entire package meal and almost each course has more than one choice for selection, fitting all items and descriptions in one big menu does not seem a good design. Perhaps a thin booklet type of menu is more suitable for information display and browsing.

Table 4
Scores of Satisfaction, Adequate Service, and Desired Service

Service Measure Attributes	Gap Analysis: Evaluation of Satisfaction, Adequate Service, and Desired Service									
	Perception	Expectation	(1) Satisfaction	Ranking	Adequate Service	(2) MSA	Ranking	Desired Service	(3) MSS	Ranking
<i>Reliability</i>	8.61	8.56	0.05	1	8.18	0.43	1	8.36	0.25	1
<i>Responsiveness</i>	8.13	8.57	-0.44	5	7.94	0.19	4	8.17	-0.05	2
<i>Assurance</i>	8.67	8.66	0.01	2	8.47	0.20	3	8.88	-0.21	3
<i>Empathy</i>	8.13	8.53	-0.40	4	7.82	0.31	2	8.58	-0.45	4
<i>Tangibles</i>	8.03	8.33	-0.30	3	8.38	-0.35	5	8.70	-0.67	5
<i>Overall Score</i>	41.56	42.65	-1.09		40.78	0.78		42.68	-1.12	

(1) Satisfaction Score = Perception Score – Expectation Score

(2) MSA Score = Perception Score – Adequate Service Score

(3) MSS Score = Perception Score – Desired Service Score

Statistical findings suggest that a positive overall MSA score (.78) indicates that the perceived service performed is above the service that customers consider to be adequate. However, the attribute *Empathy* received the lowest point (7.82), which is consistent with the concerns about the professionalism of restaurant employees discussed earlier. In general, the MSA values suggest that the top two service gaps exist in *Reliability* (.43) and *Empathy* (.31) for the service delivery process. Although *Tangibles* (8.38) is considered the second most adequate attribute slightly lower than *Assurance* (8.47), this result is not consistent with the satisfaction level measured previously. One of the possible explanations could be that the specific concerns on these tangible factors for overall satisfaction analysis do exist but customers still view *X Steakhouse* as a fine dining place when taking other service attributes into consideration. The overall MSS score is negative (-1.12) suggesting that *X Steakhouse* falls short of the service levels that customers desire. *Tangibles* in this case has the smallest MSS (-.67) suggesting that customers are *not* happy with the noticeable factors, such as parking, space, menu, seating, and noise. This does confirm the finding in the satisfaction analysis and helps explain the inconsistency between MSA and satisfaction analysis. The company should address this issue seriously. *Tangibles* and *Assurance* both score high, 8.70 and 8.88 respectively, which discloses the elements of the service on which customers really stress. When considering both MSA and MSS values together, *Reliability* (ranking as the first) seems to be the greatest advantage contributing to the service quality and *Tangibles* (ranking as the last) needs some improvements. Overall, the findings of satisfaction, MSA and MSS analyses together suggest that the service level that customers perceived is mostly above the “at least acceptable” service level (i.e., the adequate service) but is mostly below what customers hope to receive (i.e., the desired service). This finding perhaps can offer important information for future business development.

The Fishbein model (Aizen & Fishbein, 1980) is well known to consumer researchers and can help measure restaurant customers’ attitudes towards the SERVQUAL’s five attributes. However, it is not necessary to adopt its

complicated mathematical equation for the research; in stead, the model is being modified using Solomon's theory (2002) to fit the need of the study. Statistical results after adopting the modified Fishbein model for multiattribute attitude measurement are exhibited in Table 5. The score for multiattribute attitude measurement is calculated using the following equation (Solomon, 2002):

$$A_{ijk} = \sum \left[\left(\frac{\beta_{ijk}}{n} \right) \times \left(\frac{I_{jk}}{n} \right) \right]$$

Where, A is the overall attitude toward the restaurant, B the strength of the belief that the restaurant has any particular attribute (i), i the SERVQUAL attribute of a restaurant, j the restaurant, k the customers of a restaurant, I the customer evaluation of the goodness or badness of the attribute (i), n the total number of customers. By adopting the equation, a customer's attitude toward a restaurant's service was measured based on the sum of the products deriving by multiplying the mean values of SERVQUAL attributes and their respective mean value of importance.

Statistical results as exhibited in Table 5 suggest that there are no great differences among the examined restaurants. *Restaurant 3* has the highest total mean attitude (8.70) and *Restaurant 1* has the lowest total mean attitude (8.24). The variance between these two restaurants is little. In addition, the relative importance presenting a very close 12% can also confirm this interpretation. This finding suggests that customers of *X Steakhouse* hold a very close evaluation system to assess the services delivered in the same brand name restaurants and the same level of service quality might have been provided by the company across different restaurants in different locations. Moreover, *Restaurant 3* has achieved the highest score in the *Assurance* attribute ($\mu = 9.06$), while *Restaurant 1* shows the lowest score in the *Responsiveness* attribute ($\mu = 7.94$). This lowest value in *Restaurant 1* is also the lowest score among all examined restaurants suggesting that management in *Restaurant 1* should re-evaluate the variables of the *Responsiveness* attribute, such as "quickly correct mistakes," "employee anticipate guests' needs," "food served promptly," "give supports to other employees," and "frequency of stop-by and checking" to identify the source of this issue. Interestingly, the *Responsiveness* attribute is also ranked in last place with the lowest satisfaction score (-.44) in the previous analysis. This is a consistent result indicating the true concerns customers have. The company should conduct a thorough study on the staffing and daily business operation to carry out some improvements.

Overall, although there is no great discrepancy in assessments across the eight restaurants, those restaurants with scores below the mean of attitude (8.45), *Restaurant 1*, 7, 4, and 5, might still want to inquire into the evaluation factors of each service attribute to understand what might be responsible for the low scores. *Restaurant 3*, the most desired and high quality restaurant compared to the rest, does not have a huge lead in this assessment and probably wants to look into its attributes of *Empathy* and *Tangibles* for improvements as well. From the table, the *Tangibles* apparently is one of the most important attributes but has the lowest values in MSA and MSS measurement. The company should not take this finding lightly. Another point worthy to mention is that the results presented in Table 5 suggest that the company might have reached a standardized business operation and development for its *X Steakhouse* brand. This is strength to gain market shares quickly. In conclusion, the measurement and evaluations of the service gaps are completed and the research objectives are achieved with multiple contributions. The researchers are able to a) evaluate the service quality, b) realize customers' satisfaction levels, c) understand customers' attitudes toward SERVQUAL's service attributes, d) discover whether or not there is a big variance in service among the restaurants under the same brand name, e) determine the strong and weak points for service improvements, and f) generate managerial perspectives to help decision making for the examined restaurants and their parent company. The findings of this empirical research provide useful administrative suggestions to the company for taking any necessary actions to improve the service quality of its chain restaurant.

Table 5
Multiattribute Attitude Measurement for Each Restaurant

<i>Mean values of SERVQUAL attributes (b) for each restaurant and average importance of attributes (I)</i>					
Restaurant	SERVAUAL Attributes				
	Reliability	Responsiveness	Assurance	Empathy	Tangibles
1	8.46	7.94	8.47	8.08	8.21
2	8.72	8.54	8.64	8.89	8.52
3	8.63	8.86	9.06	8.45	8.53
4	8.61	8.13	8.67	8.17	8.12
5	8.73	8.15	8.77	8.15	8.15
6	8.86	8.21	8.96	8.26	8.16
7	8.57	8.08	8.55	8.18	8.24
8	8.39	8.28	8.85	8.33	8.32
Importance of attributes (I)	0.21	0.19	0.20	0.19	0.21

<i>Multiattribute attitude measurement</i>			
Restaurant	Attribute score	Relative importance	Ranking
1	8.24	12.19%	8
2	8.66	12.81%	2
3	8.70	12.88%	1
4	8.34	12.34%	6
5	8.40	12.42%	5
6	8.50	12.57%	3
7	8.33	12.32%	7
8	8.44	12.48%	4
Total:	67.60	100%	
Mean of attitude:	8.45		

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JOB STRESS, COPING STRATEGIES, AND BURNOUT AMONG FOOD & BEVERAGE SUPERVISORS IN HOTEL INDUSTRY

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ABSTRACT

This study is to investigate the perceived level of stress of hospitality supervisors, to establish frequency of the use of various coping strategies, and to determine the burnout rate. This study is also to identify the coping strategies to engage the job stress and then to empirically examine the relationships among stress, coping strategies, and job burnout. A purposive sample of food and beverage supervisors of large hotels was selected. Several significant relationships among job stress, coping strategies and burnout were found in this study.

Key Words: job stress, coping strategies, burnout, hotel industry, supervisor.

INTRODUCTION

A challenge for the hospitality industry has always been to provide quality service that satisfies consumers. Most firms start to realize that the front-line employees who deliver the competence, convenience, respect, care, and integrity create true value for the customer (Berry, 1995). J. Willard Marriott, founder of Marriott Corporation, stated that “In the service business you can’t make happy guests with unhappy employees” (Hostage, 1975). The hospitality industry is a people industry. Hospitality jobs require customer contact around the clock 7 days a week. The constant contact with customers, as well as the nature of the interpersonal encounters comprise a major cause of service provider stress and burnout. Studies of human service practitioners, people in daily contact with others, have shown a high incidence of job burnout (Stevens & Higgins, 2002). According to estimations, 28% of European workers suffer from stress and 23% already have burnout (Paoli & Merllie, 2001).

The complex and changing environment of the hospitality industry presents a never ending array of stimuli, pressures and demands which can become sources of stress for front-line personnel. Basically, it is among the hotel industry employees that stress accumulates as work pressure increases with the increase in demand. Hotel supervision is a service-oriented profession, which means dealing with needs and demands incurred by guests and employees. Individuals in these positions will continue attempts to master and overcome the threats they encounter with whatever unique, diverse method they can employ. It is clear that some individuals will cope more effectively than others. The failure of those who do not cope effectively will be revealed in the form of absenteeism, decrease in periodicity and performance, strained interpersonal relationships, and illness. The cost is serious to organizations. Work-related stress is of growing concern for researchers and management alike. A focus on the identification of current and potential stressors in organization, and the development of strategies which individuals and management can use to manage and reduce stress effectively, is imperative. Therefore, the purposes of this study are to investigate the perceived level of stress of hospitality supervisors, to establish frequency of the use of various coping strategies, and to determine the burnout rate. This study is also to identify the coping strategies to engage the job stress and then to empirically examine the relationships among stress, coping strategies, and job burnout.

Job Stress

Accordingly, job stress is defined as a particular relation between the employee and his or her work environment (e.g., Lazarus and Folkman, 1984; Kahn and Boysiere, 1994). Stress can also be viewed as an individual’s reaction to the characteristics of work environment that appear threatening (Jamal, 1984). One definition suggests that job stress results from job features that pose a threat to the individual (Caplan et al., 1975). Threat may be due to either excessive job demands or insufficient supplies to meet employees’ needs. When the job requires too much work in too short a time, job overload exists. Beehr and Newman (1978) reviewed numerous

definitions of job stress. They conclude that job stress is the interaction of work conditions with worker traits that changes normal psychological functions. Their definition also provides for stress that improves performance. This is important for both industry and employees. So job stress can be defined as “work demands that exceed the worker's coping ability” (Karasek and Theorell, 1992).

Numerous researches suggests that work-related stress should be conceptualized and studied as a multifaceted problem involving personal characteristics of the individual, situational factors, and the organizational and cultural context in which such stress occurs (Farber, 1983). French and their colleagues (1972) studied sources of job stress, including workload; role conflict; poor relationships between workers and their peers, supervisors, and subordinates; and lack of subjective fit between person and environment, in a number of occupations. Cooper and Marshall (1978) divided stressors into five categories: those intrinsic to the job, those resulting from one's role in the organization, career development, relationships with others, and organizational structure and climate. Ivancevich and Matteson (1980) suggest four clusters of work stressors: physical environment, individual level (a mixture of role and career development variables), group level (primarily relationship-based), and organization level (a mixture of climate, structure, job design, and task characteristics). Schuler (1982) proposed seven categories of work stressors in organizations: job quality, relationships, organizational structure, physical quality, career development, change and role in the organization.

Coping Strategies

Coping has been defined as efforts to reduce stress and strain (Shinn, et al., 1984). Individual or organizational performance results from what coping strategies are selected in the cognition of job stressors, and work-related stress is determined by how individuals perceive the stressful situation. In this perspective, coping refers to the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts among them when individuals meet difficult tasks (Folkman and Lazarus, 1980). Coping behaviors are defined conceptually as individuals' overt attempts to alleviate or respond to stressful conditions at work. Comprehensively, coping seems to be an analysis and evaluation process to determine ways of enabling one to take the advantages of affirmative results rather than negative results and adverse effects caused by stressors.

Four dimensions of coping strategy are categorized by defining coping strategy as the cognitive selection process of proper response adapting to the particular stressors experienced from stressful events (Latack, 1984). First, it is the direct action strategy according to the stressful situations. Individuals can cope with stress by attempting to directly alter the stressful situation, or by attempting to alter their relationship to the situation. Second, externalizing strategy is a conscious restriction of expectations for job satisfaction and a focus on the monetary rewards from employment. Thus, the individual shifts the criterion of job satisfaction from intrinsic to extrinsic rewards. Such transition of the job satisfaction criterion makes one inevitably accept the unsatisfying occupational conditions. Third, internalizing strategy is the optimistic comparisons of events relative to the past and relative to events occurring to peers in order to enhance one's views of the present situation. Thus, current problems are seen as temporary because, in the future, conditions are going to be better. Fourth, avoidance strategy is the selective inattention to the unpleasant aspects of events and the heightened attention to pleasant features so much that the problem recedes from awareness. Also, the individual downplays the importance of work problems relative to other life events.

Job burnout

Freudenberger and North (1985) define burnout as a state of physical and emotional depletion resulting from conditions of work. Burnout is viewed as a process that occurs when workers perceive a discrepancy between their work input and the output they had expected from work. Burnout is a form of reaction to job stress and is most likely to occur among service workers unable to deal with excessive demands placed on them (Lee and Ashforth, 1993). Maslach et al. (2001) define burnout as a prolonged response to chronic emotional and interpersonal stressors on the job. Schaufeli and Enzmann (1998) consider it as special type of prolonged occupational stress that results particularly from interpersonal demands at work.

A group of psychologists consider job burnout as a type of stress, which is one dimensional (Cordes and Daugherty, 1993). Others view it as multi-dimensional (Maslach and Jackson, 1981). The current consensus is that job burnout is composed of three subconstructs: emotional exhaustion, depersonalization, and personal accomplishment. Emotional exhaustion refers to a lack of energy and a feeling that one's emotional resources are

used up because of excessive psychological demands. Depersonalization denotes a negative, callous, or excessively detached response to other people who are usually the recipients of one's services or care. Reduced personal accomplishment refers to a decline in one's feelings of competence and successful achievement in one's work. Each subdimension of job burnout captures its unique aspect of job burnout (Maslach, 1993). In summary, the principal dimensions of job burnout are the stress component (emotional exhaustion), interpersonal relations (depersonalization), and self-evaluation (personal accomplishment).

Relationships among Job Stress, Coping Strategies and Burnout

Numerous studies of how individuals cope with stress have generally agreed that stress and coping can be viewed as a dynamic process formed as part of the person environmental transaction that occurs when an individual perceives a situation as stressful (Latack, 1986; O'Driscoll and Cooper, 1994; Parasuraman and Cleek, 1984). King, Stanley, and Burrow (1987) emphasized the importance of stress in terms of coping perception because stress occurs when the coping is uncertain. That is, when able to cope with stress, individuals can overcome stress, which results in the increase of job performance under stress. On the other hand, when coping is in doubt, individuals see the stressor as a threat. The similar perspective about coping behaviors can be found in the study of Parasuraman and Cleek (1984), who have suggested that not all coping behaviors are functional, and that individuals may exhibit both adaptive and maladaptive responses in their effort to manage stress. The focus was mainly put in the coping mechanism used by the individual and on strategies determined in cognitive appraisal mainly aimed at management of stress rather than prevention. For instance, some individuals seldom showed any physical and psychological symptoms under perceived high stress, whereas others experienced low stress but showed serious symptoms. The stress is, therefore, determined not by the actual demand or stressor, but by the individual's perception of that demand or stressor. In this respect, the selection of coping strategy is a procedure for determining an appropriate response to cope with any particular stressful event based on the cognitive appraisal as challenge or threat and is to reduce stress (Lazarus et al., 1985). Coping strategy chosen in the cognitive appraisal process conclusively influences job performance positively or negatively depending on whether individuals see stressful events as challenges or threats (Kobasa, 1982).

Stress has been identified as a major psychological strain that produces burnout (Cooper and Argyris, 1997). Most researchers agree that burnout is best understood in terms of situational stressor. Job stress serves to increase burnout. Two workplace stressor, work load and role stress, have been consistently linked to burnout. In Miller, Zook, and Ellis's study (1989), they concluded that in terms of workplace stressor, both workload and role stress are consistently correlated with emotional exhaustion. Another factor that influences the onset and progression of burnout is the response of the individual to these demands. Generally referred to as coping strategies, they may be understood as personal resources and are key elements in the amelioration or prevention of burnout. In Jenaro, Flores, and Arias's study (2007), they found significant relationships between coping strategies and burnout. The results of their study suggest three important influences of personal resources (coping skills) on the work satisfaction of human service practitioners. First, workers with a higher sense of personal accomplishment tended to use problem-focused coping strategies and refrained from using emotion-focused coping strategies. Second, workers with high levels of emotional exhaustion are more likely to use emotion-focused strategies and also some problem-focused strategies. Third, workers with a high sense of depersonalization refrain from initiating either problem-focused or emotion-focused strategies.

METHODOLOGY

A purposive sample of food and beverage supervisors of large hotels in Taipei, Taiwan was selected. A total of twenty lodging properties participated in this study. Fourteen of the participating properties can be characterized as upscale and six are mid-scales hotels. Mail and phone contact with human resource managers of different hotels were first established. Data were collected during 2007. Four hundred questionnaires were sent, and the 298 returned questionnaires represented 74.5% of the total food and beverage supervisors surveyed.

Measurement of variables

The survey instrument consisted of four sections: general demographic information, job stress, coping strategy, and burnout. General demographic information included six questions. Personal information was requested regarding gender, age, marital status, and education, annual gross income, and length of employment.

Job Stress: A measure for stress was generated from the works of Cooper and Marshall (1978), Ivancevich and Matteson (1980), and Schuler (1982). Respondents were asked to express the degree to which 23 statements were source of felt stress. The stress measure included statement concerning the workload, task characteristics, career development, and relationships with others. Stress rating was scored from 1 (strongly disagree) to 5 (strongly agree).

Coping strategy: four dimensions of coping strategy are applied by defining coping strategy (Latack, 1984). It is composed of 16 items collapsed into 4 subscales including direct action strategy, externalizing strategy, internalizing strategy, and avoidance strategy. A 5-point Likert-type response format was applied to express the frequency of use for each of the behaviors.

Burnout: the Maslach Burnout Inventory (MBI) (Maslach and Jackson, 1986) was used to assess burnout. The measure is composed of three dimensions: emotional exhaustion, depersonalization, and personal accomplishment. The measure is composed of 12 items to be rated on a 5-point scale.

Empirical Finding

Participants were 298 food and beverage managers from different hotels. Table 1 presents the results of demographic analysis. Of the total sample, 80 (26.8%) were male and 218 (73.2%) were female. 76 (25.5%) of the subjects were under aged 25, 115 (38.6%) were 26-30 years old, 51 (17.1%) were between age 31 and 35 years old, 26 (8.7%) were 36-40 years old, and another 30 (10.1%) were above 41 years old. 56 (18.8%) were single, 231 (77.5%) were married, and 11 (3.7%) were divorced. Majority of subjects were colleges graduates (130, 43.6%) or with bachelor degree (80, 26.8%). Average length in their current position was between 1-3 years for 34.2% of participants (102), followed by 24.2 % (72) who had been working from 4 to 6 years.

Table 1
Description of the Respondents (n =298)

Variables	Number	%
Gender		
Male	80	26.8%
Female	218	73.2%
Age		
Under25	76	25.5%
26-30	115	38.6%
31-35	51	17.1%
36-40	26	8.7%
Above 41	30	10.1%
Marital Status		
Single	56	18.8%
Married	231	77.5%
Divorced	11	3.7%
Education		
High School graduates	81	27.2%
College graduates	130	43.6%
Bachelor's degree	80	26.8%
Graduate degree	7	2.3%
Length of employment		
Under 1 year	62	20.8%
1-3 years	102	34.2%
4-6 years	72	24.2%
7-9 years	21	7.0%
10-12 years	15	5.0%
Above 12 years	26	8.7%

Rate of Job Stress: part one of the study was asked for the rate of stress levels of the respondents. Table 2 contains means and standard deviations for the major stress response. From the table it can be seen that task characteristic ($M = 3.66$) emerged as the major job stress response, followed by workload ($M = 3.52$) and career development ($M = 3.06$). Relationships with others ($M = 2.74$) was rated as the least job stress response.

Utilization of Coping Strategies: another purpose of the study was to determine the most frequently used coping strategies. Thus, ranking by mean scores, the more prevalent strategies are direct action strategy ($M = 3.84$) and externalizing strategy ($M = 3.81$). The least used strategies related to avoidance strategy ($M = 2.83$).

Burnout Rates: among the subjects, participants experience burnout most from emotional exhaustion ($M = 3.06$); followed by feelings of personal accomplishment ($M = 2.86$). Depersonalization ($M = 2.47$) was experienced least. Variance was fairly small for all three components.

Table 2
Summary of Rate of Job Stress, Use of Coping Strategies and Burnout Rates

	M	SD
Job Stress		
Workload	3.52	.74
Task characteristic	3.66	.60
Career development	3.06	.76
Relationships with others	2.74	.76
Coping Strategies		
Direct action strategy	3.84	.48
Internalizing strategy	3.81	.42
Externalizing strategy	3.43	.56
Avoidance strategy	2.83	.74
Burnout		
Emotional Exhaustion	3.06	.89
Depersonalization	2.47	.67
Personal Accomplishment	2.86	.82

Relations between Job Stress and Coping Strategies

Pearson's correlations were conducted between the different job stresses, coping strategies, and burnout. Results are shown in Table 3, where, to simplify the presentation, only significant correlations were presented.

The direct action strategy had significant and positive correlations with workload ($r = .12, p < .05$), but had a negative correlation with relationships with others ($r = -.23, p < .01$). The internalizing strategy was significant and positively correlated with task characteristic ($r = .15, p < .05$). However, the internalizing strategy was also found to be negatively correlated with relationships with others ($r = .12, p < .05$). It can be seen that the externalizing strategy was positively and significantly correlated to workload ($r = .22, p < .01$), task characteristic ($r = .16, p < .01$), and career development ($r = .14, p < .05$). Avoidance strategy had significant and positive correlations with the task characteristic ($r = .17, p < .01$), career development ($r = .27, p < .01$), and relationships with others ($r = .39, p < .01$), the strongest related variable. Therefore, H1: job stress is significantly related to copy strategy is partially supported.

Accordingly, when a F&B supervisors experiences high pressure from personal relationships, avoidance is the most common strategy applied. The higher the pressures confronted with, the more the avoidance. The supervisors, therefore, tend to hide the pressure in mind when they are facing a personal relationship problem with either their customers, colleagues or seniors. A passive attitude is the common way to temporarily avoid the pressure. Especially when the pressure come from unreasonable requests by picky costumers in some situations, the hotel supervisor always uses a retreating strategy to avoid a conflict with the customers because service quality is always the major concern in hospitality business. However, the pressure is still there and the emotion is always suppressed.

Relations between Job Stress and Burnout

Emotional exhaustion had significant and positive correlations with workload ($r = .47, p < .01$), task characteristic ($r = .31, p < .01$), career development ($r = .53, p < .01$), and relationships with others, the strongest

related variable ($r = .54, p < .01$). Depersonalization was also found to be positively correlated with workload ($r = .26, p < .01$), task characteristic ($r = .23, p < .01$), career development ($r = .42, p < .01$), and relationships with others, the strongest related variable ($r = .56, p < .01$). Personal accomplishment was positively and significantly correlated to workload ($r = .36, p < .01$), task characteristic ($r = .30, p < .01$), relationships with others ($r = .28, p < .01$), and career development, the strongest related variable ($r = .66, p < .01$). In view of these results, H 2: coping strategy and burnout is significantly related is partially supported.

Interestingly, a positive relationship was found between career development and personal accomplishment. When the supervisors were disappointed about their career development, salary, position promotion and continuing education opportunity, they easily feel lack of personal accomplishment and result in burnout. Also, the problem from a personal relationship or simply a miscommunication may result in emotional exhaustion and job burnout.

Relations between Coping Strategies and Burnout

Emotional exhaustion had significant and positive correlations with avoidance strategy ($r = .42, p < .01$). However, this burnout dimension negatively correlated with direct action strategy ($r = -.20, p < .01$). Depersonalization was significant and positively correlated with avoidance strategy ($r = .47, p < .01$). However, depersonalization negatively correlated with direct action strategy ($r = -.33, p < .01$) and internalizing strategy ($r = -.11, p < .05$). Apparently, personal accomplishment was positively and significantly correlated to externalizing strategy ($r = .19, p < .01$) and avoidance strategy ($r = .42, p < .01$). Personal accomplishment was also negatively and significantly related to direct action strategy ($r = -.16, p < .01$). In view of the above findings, H3: copy strategy is significantly related with burnout is partially supported.

The direct action strategy of the coping strategy dimension is negatively correlated with burnout. F&B supervisors tend to experience a lower level of burnout if they apply more direct action strategies in coping with their job pressures. On the other hand, the avoidance strategy of the coping dimension is positively corrected with emotional exhaustion, depersonalization and lack of personal accomplishment in the burnout dimension.

Table 3
Relations among Job Stress, Coping Strategy, and Burnout

Coping Strategy	Direct action strategy	Internalizing strategy	Externalizing strategy	Avoidance strategy
Job Stress				
Workload	0.12*		0.22**	
Task characteristic		0.15*	0.16**	0.17**
Career development			0.14*	0.27**
Relationships with others	-0.23**	-0.12*		0.39**
Burnout		Emotional Exhaustion	Depersonalization	Personal Accomplishment
Job Stress				
Workload		0.47**	0.26**	0.36**
Task characteristic		0.31**	0.23**	0.30**
Career development		0.54**	0.42**	0.66**
Relationships with others		0.53**	0.56**	0.55**
Coping Strategy				
Direct action strategy	-0.20**		-0.33**	-0.16**
Internalizing strategy			-0.11*	
Externalizing strategy				0.19**
Avoidance strategy	0.42**		0.47**	0.42**

** $p < .05$. * $p < .01$.

CONCLUSIONS

Three goals were established in this study: (a) to investigate the perceived level of stress of F&B supervisors, (b) to establish frequency of the use of various coping strategies, and (c) to determine the relationship among job stress, coping strategies, and burnout. First, from the results of the study, it is possible to identify that the

major job stress of F&B supervisors originate from task characteristic and workload. It is suggested that training programs designed to assist supervisors to handle difficult clients and to manage customers-related stress be implemented. In addition, it must ensure that supervisors are provided with adequate breaks in keeping with their workload.

Second, direct action strategy is the most prominent coping strategy used by respondents in this study. Direct action coping strategy may allow one to perceive the situations as opportunities and may, in turn, contribute to reduce job stress. Others who take internalizing, externalizing, and avoidance coping strategies appear to see the situations as a threat, so that job stress makes the deleterious roles to job stress. The correlation of coping strategy with job stress shows the extent to which use of that strategy is associated with a particular stress. The higher the pressure F&B supervisors feel in personal relationships, the more likely they are to apply avoidance strategy to cope with the pressure and try to abandon the current problem. However, the avoidance strategy was not able to reduce stress. A sense of burnout may result. Conclusively, direct action coping strategy may provide individuals more chances to cope with job stress; thus, supervisors should minimize the use of externalizing, internalizing, and avoidance coping strategies to reduce job stress in the work environment. As suggested by Parasuraman and Cleek (1984), the effects of direct action strategy might be the best among coping strategies and that individuals would experience lower levels of stress if they learned how to engage it in their efforts to cope with job stress. Training programs might be especially useful in helping individuals to reduce the incidence of dysfunctional coping behaviors.

Finally, when supervisors try to manage the pressure with passive attitudes, the sense of burnout increased. Conversely, the F & B supervisors experience a lower level of burnout if they apply more direct action strategies in coping with the pressures from their job. The supervisors who were disappointed about their career development, salary, position promotion and continuing education opportunity, are easily susceptible to emotional exhaustion. Burnout, however, may finally result in their resignation. Hence, intervention techniques should focus on increasing the use of active coping skills by supervisors. Such skills as problem-solving training or techniques of behavioral or cognitive rehearsal might help increase the use of active coping strategies (focus efforts on resolving the situation) in instances when they are not in use. More frequent use of active coping strategies may decrease for those now suffering from burnout.

In summary, the results of this study can be used as part of a guideline including what should be considered to reduce job stress in the work environment. This guideline will facilitate the implementation of intervention procedures to alleviate stressful events, and will be useful to develop evaluation criteria for the existing and proposed stress prevention programs. For the staff members to give their best performance, their individual needs and work environment should be given a high priority (Fuller, 1994). The key element for achieving this is to cater to the different needs and demands of F & B supervisors in order to help eliminate stress in the workplace. Therefore, hotel CEOs should make efforts to maintain a good working environment, such as providing more promotion opportunities, better training and recreation programs, and more clarified job definitions and position autonomy. Burnout may result from stress, as demonstrated in this study; however, excellent management policies can reduce the chance of burnout and the related detrimental effects. A happy working group can produce remarkable revenue for the hotel. For F & B supervisors, it is important for them to maintain a positive attitude toward their personal life and job. Good inter-personal relationships, regular recreational activities and sharing working experiences with colleagues may be applied to ease pressures and reduce the chances of burnout.

Some potential limitations of this study should be noted. The data was collected from convenient samples of F & B supervisors in Taiwan. Due to the limited sample frame and sample size, the findings of the study should be considered tentative. Future study will hopefully employ larger samples from more geographically diverse areas. Also, the study focused on stress, coping strategies, and burnout among hotel supervision. Future research may further investigate the relationships for front-line employees and other industries.

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DO LEADERSHIP STYLES IMPACT EMPLOYEES' SERVICE ATTITUDES? A CASE OF THE RESTAURANT IN TAIWAN

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ABSTRACT

This study investigates the relationships between leadership styles and employees' service attitudes in the restaurant industry. The results provide insights for restaurateurs seeking competent leaders as well as managerial training development and strategies. Using data from restaurants in Taiwan, results show that transformational leadership is positively related to employees' service attitudes; however, transactional leadership is partially positively related. The findings also provide evidence that leaders' gender, employees' tenure, and work status have effects on leadership styles and employees' service attitudes.

Key Words: leadership; service attitude; restaurant industry; transformational leadership; transactional leadership

INTRODUCTION

For decades much research in business and management has focused on leadership. The most popular theoretical approach studied by researchers is that of transactional and transformational leadership. One of the major reasons for this popularity is that transformational leadership emphasizes the leader's ability to transform his subordinates through two essential factors in today's competitive business environment: interpersonal relationships and innovation. The theory also proposes that an effective transformational leader is able to change his management skills according to different people and situations (Bass & Steidlmeier, 1999).

Not surprisingly, employees are the direct recipients of a manager's leadership style; hence, their attitudes and behaviors are directly affected. However, behaviors are known to be less stable than attitudes and less likely to last over time, while attitudes are more enduring and can enhance long-term behaviors (Williams & Wiener, 1996). Thus, managers should try to instill good or positive attitudes in their employees in order to generate sustainable behaviors. Given the significance of leadership in the service industry, it is surprising that few studies center on the relationships between leadership styles and employees' service attitudes in the restaurant industry. It is essential for researchers to examine the relationship between leadership styles and service attitudes. In addition, individual variables such as gender, age, tenure, work status in leaders and employees are also explored in this study. It is assumed that individual differences will influence leadership styles as well as service attitudes.

The key contributions of this study are threefold. First, it reveals the leadership style prevalent in the restaurant industry. Second, it provides evidence of the dimensions of transactional and transformational leadership influencing employees' service attitudes. Finally, it shows that differences in variables between leaders and employees impact leadership styles and employees' service attitudes. These findings will provide insights for restaurateurs seeking managers and for companies designing training programs for both leaders and employees.

LITERATUAL REVIEW

Transactional and Transformational leadership

One of the most widely used instruments for testing leadership style is Bass's (1985) Multifactor Leadership Questionnaire (MLQ). The latest version of MLQ (Form 5X) includes nine factors: five transformational leadership factors, three transactional leadership factors, and one nontransactional laissez-faire leadership factor (Bass & Avolio, 1995).

Transactional leaders give rewards or punishments to encourage performance, thereby forming transactional relationships (Bass, 1985). Compared to transactional leadership, transformational leadership emphasizes a higher level of internal satisfaction. Leaders inspire and take care of subordinates, instilling active organizational culture to encourage subordinates to perform better than expected. Both transactional and transformational leadership styles were proven to be powerful sources of effectiveness in private and public organizations (Bass, 1998; Bass & Avolio, 1990). An empirical study conducted by Antonakis et al. (2003) supported Bass's model and showed that leaders with higher scores on Bass's MLQ have better performance outcomes.

Some studies have examined the relationship between quality management and transactional/transformational leadership (e.g., Berson & Linton, 2005; Dean & Bowen, 1994; Sousa & Voss, 2002). Research supports that transformational leadership of top management has a positive impact on quality management (Sousa & Voss, 2002). However, there is disagreement among researchers over the impact of transformational and transactional leadership at lower levels of the organization (Sousa & Voss, 2002). Dean and Bowen (1994) argued that transformational leaders of lower level units, rather than transactional leaders, can motivate employees to improve performance and focus on customers.

Service Attitude

Much research has indicated that quality service delivery is significantly associated with a firm's success and survival in today's competitive environment (Parasuraman, Zeithaml, & Berry, 1985; Reichheld & Sasser, 1990). Garvin (1984) argued that there are eight basic elements of product quality. Within elements, service ability involves service attitudes, professional manners, and speed. Simply put, customers expect that good service is consistent with employees' good attitudes and professional manners to solve problems quickly. Larsen and Bastiansen (1992) developed an instrument for measuring service attitudes – the Service Attitude Questionnaire (SAQ) and suggested that there are differences in service attitudes in the different sectors. They argued that employees' service attitudes in the private sector are better than those in the public sector. Indeed, Sharma (1999) argued that customers evaluated employees and their products more positively when they observed employees having positive attitudes.

Leadership Styles and Service Attitudes

Scholars have already confirmed that leadership is effective in motivating employees' performance (Avolio et al., 2004; Bass, 1998; Judge & Piccolo, 2004). Research has also shown that leadership has positive effects on the quality of service (Dale & Duncalf, 1984; Lascelles & Dale, 1989). Berry et al. (1990) found that in order to improve service quality, leaders have to inspire and motivate employees, give consideration, and provide directions as well as future vision. Gupta et. al (2005) developed a conceptual model and pointed out that leadership, organizational culture and employee commitment are three important factors in achieving total quality service. In Waldman (1993) and Jabnoun's (2002) studies, transformational leadership facilitated the execution of successful service. Jabnoun and Rasasi (2005) further investigated the relationship between transformational leadership and service quality and provided evidence to confirm that transformational leadership improves employees' attitudes and performance (Lowe et al., 1996).

HYPOTHESES

Leadership Styles and Employees' Service Attitudes

Since both transactional and transformational leadership styles were proven to be powerful sources of effectiveness in the U.S. Army, Navy, and Air Force, and in private and public organizations (Bass, 1998; Bass & Avolio, 1990), many researchers have confirmed that transformational leadership has a positive impact on performance (e.g., Antonakis, 2003; Lowe et al., 1996; Judge & Bono, 2000). For the service industry, the quality of service delivery is significantly associated with a company's success and survival in today's competitive environment (Parasuraman et al., 1985; Reichheld & Sasser, 1990; Sultan & Simpson, 2000). As Hartline and Ferrell (1996) noted, managers have to increase employees' self-efficacy and job satisfaction as well as reduce employees' role conflict in order to increase customers' perceptions of service quality. Following the previous literature, the hypotheses were listed below:

Hypothesis 1. There is a positive influence between leaders' transformational leadership behaviors and employees' service attitudes.

Hypothesis 2. There is a negative influence between leaders' transactional leadership behaviors and employees' service attitudes.

Leadership Styles and Leaders' Gender and Age

According to Eagly and Johnson (1990), women displayed a more participative or democratic style, and men displayed a more directive, autocratic style. Men are more task-oriented while women are more social-oriented (Eagly & Karau, 1991). However, as management trends towards flatter organizations, team-based management, and globalization (Evans, 2001; Rigg & Sparrow, 1994), the reflection of leadership styles requires more "feminine" characteristics (Van der Boon, 2003). More recent work addressed that women are believed to display more transformational leadership style than men (Mandell & Pherwani, 2003). On the other hand, the results of the research on exploring the relationship between the leadership styles and leader's age are mixed. While some research showed that age was correlated with transactional leadership (Ramirez, 2002), Janssen (2004) found that the leader's age had no significant impact on leadership styles. However, in Asian society, older people are considered as experience people and possess more management skills, such as communication and problem-solving. Hypotheses were proposed:

Hypotheses 3a. Female leaders have a higher tendency toward transformational leadership than male leaders.

Hypotheses 3b. Male leaders have a higher tendency toward transactional leadership than female leaders.

Hypotheses 3c. There is a difference between a leader's age and leadership style.

Employees' attitudes and employees' gender, tenure, age and work status

Society considers men financial supporters; they must therefore devote more to work and have more positive work attitudes. On the other hand, women are identified by their nurturing roles in relationships and their focus on extra work, such as family-care (Singh et al., 2004) and thus have lower work attitudes. As a consequence, men represent more positive work attitudes than their counterparts. Tenure refers to years in a job (McDaniel et al., 1988), years in an organization (McEnure, 1988), or years in a position (Borman et al., 1993). Many researchers have examined the relationship between job experience and work performance and found they are positive correlated (Borman et al., 1993; McDaniel et al., 1988; Vance et al., 1989). This study assumed that tenure has a positive impact on employees' service attitude based on prior research showing that experience leads to higher performance ratings. Previous studies have examined the relationship between age and employee work attitudes (Rhodes, 1983) as well as age and performance (Waldman & Avolio, 1986). Cleveland and Shore (1992) found that older people have more positive attitudes than younger people but receive lower performance rating from themselves and managers. Finally, scholars have investigated the relationship between part-time and full-time employees' attitudes (McGinnis & Morrow, 1990). Maynard et al. (2005) further explored the job attitudes of people working part-time. Similar to previous studies, their findings showed that part-time workers report lower job attitudes than others (caretakers, voluntary part-time workers, and full-time workers). Thus, the hypotheses were as following:

Hypotheses 4a. Male employees are more likely to have better service attitudes than female employees.

Hypotheses 4b. Employees with longer years in the organization have better service attitudes.

Hypotheses 4c. Older employees are more likely to have better service attitudes than younger employees.

Hypotheses 4d. Part-time employees are less likely to have better service attitudes than full-time employees.

METHODOLOGY

Sample and Data Collection

The sample was chosen from different American-brand casual restaurants (i.e., T.G.I. Friday, Chilis, Ruby Tuesday) in Taiwan. They are expected to have better management and employee standard than local restaurants. Testing these American-brand casual restaurants provided profound insight into leadership styles in different cultural settings. Eighteen casual restaurants were asked to participate by researchers in this study; yet only ten were willing to participate. The survey was administered on-site individually. The original survey was developed in English and translated into Chinese by a bilingual speaker (English and Chinese) first. After this, the questionnaire was back-translated to English by another bilingual translator. This would allow us to minimize the effect of misunderstanding because of the different cultural settings (Brislin, 1980). All participants in this study were

informed of the purpose of the questionnaire and told that taking the survey was voluntary. They were also ensured that their responses would remain anonymous and confidential.

Research Instruments

The first section of the questionnaire focused on transactional and transformational leadership. Employees were asked to rate their leaders using a five-point Likert scale where 1 represents “Not at all” and 5 represents “Frequently, if not always.” Nine dimensions of MLQ (Bass & Avolio, 1995) are idealized influence (attributions), idealized influence (behaviors), individualized consideration, intellectual stimulation, inspirational motivation, contingent reward, management-by-exception (active & passive), and laissez-faire. The second section of the questionnaire aimed at examining employees’ service attitudes. SAQ (Larsen & Bastiansen, 1992) was utilized to test employees’ service attitudes. This is a self-rated section. That is, employees were asked to rate their own service attitudes by using a five-point Likert scale where 1 represents “Strongly Disagree” and 5 represents “Strongly Agree.” Three dimensions of service attitude in the SAQ are cognitive, emotional, and behavioral. The third section of the questionnaire provided general information about leaders and employees’ individual variables. Leaders’ variables include their gender and age. Employees’ variables include their gender, age, tenure (years in the organization) and work status (full-time/part-time).

RESULTS

Descriptive statistics

Ten casual restaurants participated in this study, resulting in a total of 172 completed surveys. Six restaurants had operated for 4 to 6 years (60%), and 3 for 7 to 9 years (30%). Most of restaurants had 30 to 39 employees (60%) and 40% had 20 to 29 employees. Regarding the leaders, 60% of ratees (leaders) were males, while 40% were females. Leaders’ ages ranged from 30 to 39 (50%) and 40 to 49 (50%). 52.9% of respondents were females and 47.1% were male. 74.4% were between 20 to 29 years old. The majority of respondents had worked in the current restaurants within 2 years (84.9%). Among the respondents, 62.2% were full-time workers and 37.8% were part-time.

Employees’ perceptions of the leadership styles in their restaurants

The means and standard deviations for the variables used are shown in Table 1. The results showed that for transformational leadership dimensions, idealized influence attributions received the highest rating (mean = 2.96), followed by individual consideration (mean = 2.86), inspirational motivation (mean = 2.72), intellectual stimulation (mean = 2.72), and idealized influence behaviors (mean = 2.63). For the transactional leadership dimensions, active management by exception was rated as the top 1 leadership style with a mean of 4.15, followed by contingent reward (mean = 2.75) and passive management by exception (mean = 2.23). Laissez-faire received an average score of 2.89. All in all, the employees rated their store managers low in all transformational and transactional leadership dimensions except the active management by exception leadership style. The findings indicated that leaders have a high tendency toward transactional active management-by-exception leadership style in their restaurants. In addition, the Cronbach α of internal reliability for all leadership dimensions was higher than 0.7. It is consistent with Nunnally (1978) that a coefficient alpha higher than 0.7 is considered to be good.

Table 1
Mean and standard deviations of the leadership style dimensions (n=172)

	Mean	St. Dev.	Min.	Max.
1. Idealized Influence Attributions	2.9680	.14954	2.00	3.25
2. Idealized Influence Behaviors	2.6323	.37796	2.00	3.25
3. Inspirational Motivation	2.7282	.45551	2.00	3.25
4. Intellectual Stimulation	2.7238	.44183	2.00	3.50
5. Individual Consideration	2.8605	.27334	2.00	3.50
6. Contingent Reward	2.7515	.33168	1.75	3.00
7. Active Management by Exception	4.1541	.27484	3.75	5.00
8. Passive Management by Exception	2.2398	.42437	1.00	3.00
9. Laissez-Faire	2.8963	.34527	2.00	3.50

Measured on a five-point Likert scale: 1=not at all; 5=frequently, if not always

Employees' perceptions of their own service attitudes

Contrasted to leadership styles, the mean values for all three dimensions of service attitudes are relatively high, representing employees' belief that they possess good service attitudes. The results are shown in Table 2. Cognitive dimension received the highest score with a mean of 4.18 while emotional dimension is slightly less than cognitive dimension with an average score of 4.17. The high ratings indicated that employees realized that it was their job to satisfy customers' needs even if they deviated from their job instructions. The Cronbach α of internal reliability for all three dimensions of service attitudes are higher than 0.7.

Table 2
Mean and deviations of the service attitude dimensions (n=172)

	Mean	St. Dev.	Min.	Max.
1. Cognitive	4.1819	.26223	3.14	5.00
2. Emotional	4.1737	.27587	3.13	5.00
3. Behavior	4.0548	.33040	3.29	5.00

Measured on a five-point Likert scale: 1=strongly disagree; 5=strongly agree

Relationship between leadership styles and service attitudes

Pearson correlation was used to examine the relationship between leadership styles and employees' service attitudes. The results are shown in Table 3. The correlation analysis demonstrated that all transformational leadership styles have significant positive impact on employee's cognitive and emotional dimensions of service attitude. Among these, ideal influence attributions have significant correlation with employee's service attitudes at all dimensions. It showed a positive influence between leaders' transformational leadership behavior and employees' service attitudes. Hypothesis 1 is supported.

With respect to transactional leadership, contingent reward was found to have significantly positive correlation with all dimensions of service attitude. Contingent reward focused on the exchange relationship between performance and rewards. It is not surprising that employees will work harder and possess good service attitudes toward their customers to achieve their performance goals. Active management-by-exception was also highly correlated with all dimensions of service attitude. This type of leadership style emphasized mistake correction and tracking errors. In the restaurant industry, employees are the first line representatives of companies and interact with customers directly. Hence, any mistakes are more likely to be corrected immediately. It is feasible that active management-by-exception has a significant impact on employees' service attitudes. Passive management by exception has no significant impact on service attitudes while laissez-faire was negatively associated with all dimensions of service attitude. Drawing from the results, transactional contingent reward and active management by exception leadership have high involvement in employees' service attitudes. It shows a partly positive influence between leaders' transactional behavior and employees' service attitudes. Thus, Hypothesis 2 is not supported.

Table 3
Correlation matrix of leadership dimension and service attitude dimension

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Idealized Influence Attributions	-											
2. Idealized Influence Behaviors	.263**	-										
3. Inspirational Motivation	.237**	.255**	-									
4. Intellectual Stimulation	.092	.325**	.406**	-								
5. Individual Consideration	.212**	.201**	.190*	.260**	-							
6. Contingent Reward	-.014	.077	.051	.237**	.103	-						
7. Active Management by Exception	.174*	-.028	.071	.048	.098	-.031	-					
8. Passive Management by Exception	.035	.008	.141	-.013	.019	.034	-.102	-				
9. Laissez-Faire	-.086	.024	-.008	-.088	-.096	-.114	-.154*	.163*	-			
10. Cognitive	.346**	.384**	.511**	.449**	.409**	.165*	.217**	.045	-.002	-		
11. Emotional	.295**	.260**	.222**	.217**	.197**	.311**	.325**	.079	-.019	.524**	-	
12. Behavior	.243**	.097	.115	.089	.104	.199**	.196**	.026	-.165*	.209**	.520**	-

Note: n=172.

*P<0.05, **P<0.01 (2-tailed).

Relationship between leadership styles and leaders' gender and age

In this section, we examine the relationship between leadership styles and leaders' gender and age by using *t*-test and ANOVA. There were no significant differences with leader's ages and either transactional leadership or transformational leadership (table 4). The result does not support Hypothesis 3c. Regarding the leaders' gender, there is a significant difference between leaders' gender and leadership styles ($t = -3.377$, $p < 0.05$). Female leaders have higher scores on overall transformational leadership (mean = 2.85) than male leaders (mean = 2.73). Female leaders are rated higher on all dimensions of transformational leadership than male leaders. This indicates that female leaders have a higher tendency toward transformational leadership than male leaders. Therefore, Hypothesis 3a is supported. For transactional leadership, there is no significant difference between male and female leaders in transactional leadership styles ($t = -1.179$, $p > 0.05$). This indicates that there is no significant evidence to support that male leaders have a higher tendency toward transactional leadership than female leaders. Therefore, Hypothesis 3b is rejected.

Table 4
Leaders' gender differences in leadership styles (n = 172)

Leadership style	Mean	Female	Male	<i>t</i>	Sig.
<i>Transformational (overall)</i>	2.79	2.85	2.73	-3.377**	.001
1. Idealized Influence Attributions	2.96	3.00	2.94	-2.875**	.005
2. Idealized Influence Behaviors	2.63	2.68	2.59	-1.497	.136
3. Inspirational Motivation	2.72	2.84	2.64	-2.879**	.005
4. Intellectual Stimulation	2.72	2.78	2.68	-1.522	.130
5. Individual Consideration	2.86	2.92	2.81	-2.681**	.008
<i>Transactional (overall)</i>	3.05	3.07	3.03	-1.179	.240
6. Contingent Reward	2.75	2.71	2.77	1.221	.224
7. Active Management by Exception	4.15	4.23	4.09	-3.425**	.001
8. Passive Management by Exception	2.23	2.25	2.22	-0.440	.661
<i>Laissez-Faire</i>	2.89	2.81	2.94	2.444*	.016

Measured on a five-point Likert scale: 1=not at all; 5=frequently, if not always

*P<0.05, **P<0.01 (two-tailed)

Relationship between employees' service attitudes and employees' gender, tenure, age, and work status

This section examines the relationship between employees' service attitudes and their demographic variables (gender, tenure, age, and work status) by using *t*-test and ANOVA. No differences were found between employees' service attitudes and their gender or age. Hypotheses 4a and 4c are rejected. Employees' tenure (years in the organization) was tested by ANOVA. The result showed that there was a significant difference between employees' tenure and their overall service attitudes ($F = 38.00$, $P < 0.05$) (Table 5). Because there is sufficient evidence, we then used a post-hoc comparison procedure, Scheffe method, to determine exactly which tenure groups are significantly different. The result indicated there are significant differences between three groups. Employees with 2 to 3 years' service length in the restaurant have significantly higher service attitudes than employees with 1 to 2 years (mean diff. = 0.25) and within 1 year (mean diff. = 0.36). Employees with 1 to 2 years' service length in the restaurant also have significantly higher service attitude than employees with within 1 year (mean diff. = 0.11). The result supports Hypothesis 4b. Next, employees' work status is examined by using *t*-test. The result shows that employees' work status has a significant impact on their service attitudes (Table 6). Findings demonstrated that full-time workers possess significantly higher overall service attitudes ($t = 3.049$, $P < 0.01$) than part-time workers. The result confirmed that part-time workers are less likely to have better service attitudes than full-time workers. Thus, Hypothesis 4d is supported.

Table 5
Employees' years in the organization and service attitudes

Service attitude	Mean	Less than 1 year (n=86)	1 to 2 years (n=60)	2 to 3 years (n=26)	<i>F</i>	<i>P</i>	Scheffe ¹
Cognitive	4.18	4.10	4.19	4.39	13.18**	.000	C>B>A ²
Emotional	4.17	4.08	4.17	4.47	25.68**	.000	C>B>A
Behavior	4.05	3.93	4.08	4.36	21.70**	.000	C>B>A
Sev. Atd. (overall)	4.13	4.04	4.15	4.41	38.00**	.000	C>B>A

¹ Scheffe multiple range test.

² A: less than 1 year, B: 1 to 2 years, C: 2 to 3 years.

*P<0.05, **P<0.01 (2-tailed).

Table 6
Work status: Full-time/part-time employees and service attitudes

Service attitude	Mean	Full-time (n=107)	Part-time (n=65)	<i>t</i>	Sig.
Cognitive	4.18	4.21	4.13	1.966*	.050
Emotional	4.17	4.22	4.09	2.936**	.004
Behavior	4.05	4.09	3.98	2.196**	.029
Sev. Atd. (overall)	4.13	4.17	4.07	3.049**	.003

*P<0.05, **P<0.01 (2-tailed).

DISCUSSION AND CONCLUSION

This paper provides evidence of leadership styles prevailing in the restaurant industry. The results demonstrated that restaurant leaders are less likely to display transformational leadership behaviors. Leaders also do not exhibit contingent reward or passive-avoidant leadership style in transactional leadership behaviors. Only transactional active management-by-exception leadership receives the high rating by employees. Perhaps this is because active management-by-exception leadership style emphasizes setting standards and detecting ineffective performance. It is especially true for restaurant employees who directly interact with customers that any mistakes will be corrected immediately.

The correlation analysis examines the relationship between leadership styles and employees' service attitudes. All dimensions of transformational leadership are positively correlated with service attitude dimensions, especially in ideal influence attributions leadership. It is probably because those leaders who possess strong confidence and power instill pride in employees and influence their service attitudes. This provides evidence that transformational leadership has significant impacts on employees' service attitudes. In transactional leadership, contingent reward and active management-by-exception leadership dimensions are positively correlated with employees' service attitudes. Contingent reward is focused on an exchange relationship between leaders and employees. Accordingly, it is easy to understand that when employees have clear rewards in exchange for their performance achievement, they are motivated more to attain the goals (Bass, 1990; Yukl, 1994) and adjust their service attitudes. Surprisingly, the active management-by-exception dimension receives the highest rating and is significantly correlated with service attitudes. This might be because active management-by-exception leaders give their full attention to mistakes, exceptions, and deviations from standards. For the restaurant industry, employees interact with customers directly and any mistakes are more likely to be corrected immediately. We are convinced that this dimension of leadership is feasible for the restaurant industry. With respect to passive management-by-exception, it is shown to have no significant impact on service attitude, while Laissez-faire was negatively associated with service attitudes.

The findings confirmed that gender differences in leadership style exist. Congruent with prior studies (Klenke, 1993; Mandell & Pherwani, 2003), this study confirmed that female leaders are more likely to possess transformational leadership than male leaders. Female leaders are more fitted into transformational leadership in that they are sensitive, enthusiastic, decent and communicative (Olsson & Walker, 2003; Van Engen et al., 2001). On the other hand, there is no significant difference between male and female leaders in transactional leadership. This is inconsistent with previous studies (Mandell & Pherwani, 2003) that males have a higher tendency toward

transactional leadership. Furthermore, a leader's age was not found to make a difference with respect to transactional leadership or transformational leadership.

Regarding employee's service attitudes and their demographic variables, employees' tenure and work status make a significant difference with respect to service attitudes. Employees with longer length of service in the organization have better service attitudes. Indeed, these employees with longer tenure possess more experience in their jobs and are more likely to meet customers' expectations. Furthermore, consistent with prior studies, full-time workers have higher levels of obligation (Van Dyne & Soon, 1998) and more commitment to organizations (Pearce, 1993) and hence, have better service attitudes. Nevertheless, gender and age show no differences on employee's service attitudes.

Overall, these results will provide insights for restaurateurs when seeking competent managers since the need for leadership is increasing for all companies (House, 1995). Although transactional and transformational leadership do not show high scores in employees' ratings, they do show high correlation with employees' service attitudes. It is recommended that restaurateurs take the findings of this study into account when considering what dimensions of transactional and/or transformational leadership influence employees' service attitudes. Finally, the results show evidence that individual variables have effects on leadership styles and employees' service attitudes.

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CHANGES IN MONETARY POLICY AND HOSPITALITY STOCK RETURNS

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ABSTRACT

This study investigates effects of changes in monetary policy on the stock performance of hospitality firms (airlines, hotels, restaurants and tourism firms) in Hong Kong. Changes in the monetary policy environment are measured by changes in the discount rate. Among four hospitality sectors, hotel and tourism stocks exhibit a higher mean return and reward-to-risk ratio during expansive monetary periods. Regression test results also support that different monetary policy circumstances have significant influences on the hotel and tourism stock performance. Lastly, a market timing investment strategy is proposed for hospitality stock investors to allocate their portfolios between hospitality stocks and risk-free assets according to movements in monetary policy environments. Following this market timing investment strategy, hospitality stock investors can significantly improve investment performance by achieving higher returns and lower risk.

Key Words: hospitality stocks, Hong Kong, monetary policy, discount rate

INTRODUCTION

It is widely believed that the monetary policy has a significant influence on security returns. The central bank conducts monetary policy by regulating interest rates, which in turn, impact a firm's cost of capital and the national economy. Thus, changes in monetary policy on the one hand signal the future movement of the economy by providing useful information about potential economic conditions and corporate earnings. On the other hand, the intrinsic value of assets, based on the fundamental asset valuation model, equals the sum of present value of all future cash flows discounted by the required rate of return. Changes in monetary policy consequently affect the valuation of financial assets through changes in the expected level of future corporate earnings and/or the discount rate employed in valuing these expected cash flows.

Empirical studies have supported the relationship between monetary policy and security returns in the developed stock markets (Conover, Jensen & Johnson, 1999; Jensen & Johnson, 1995; Mann, Atrra & Dowen, 2004) and in the emerging stock markets (Chen, Chen & Kuo, 2007). There is a similar association in various debt markets (Baker & Meyer, 1980; Cook & Hahn, 1988; Johnson, Buetow, Jensen & Reilly, 2003), in the foreign exchange market (Brown, 1981; Neal, Roley & Sellon, 1998), and in the mutual fund market (Chen, Chen, Liao & Lin, 2008; Johnson, Buetow & Jensen, 1999). Several recent hospitality research papers have investigated the connection between monetary policy factors and stock returns (Barrows & Naka, 1994; Chen, Kim & Kim, 2005; Chen, 2007b). Barrows and Naka (1994) showed that the macroeconomic variable, growth rate of the money supply, was one of the significant explanatory factors of lodging stock returns in the US. Similarly, Chen et al. (2005) found a positive link between money supply growth rate and hotel stock returns in Taiwan, and Chen (2007b) illustrated that time lag change in discount rate could significantly affect Chinese hotel stock returns.

Unlike Chen et al. (2005) who explored the relationship between economic variables and hospitality stock returns in Taiwan, Chen (2007a) examined Taiwanese hotel stock performance under two different monetary policy conditions. As he noted, the money supply has not been commonly used as a measure of monetary policy stringency because of its frequent changes. Instead, he used changes in the discount rate to measure changes in monetary policy

regime. An expansive (restrictive) monetary environment is a period with a decrease (rise) in the discount rate. He found that hotel stocks in Taiwan exhibited a higher mean return and reward-to-risk ratio under an expansive monetary environment. To examine whether the significant impact of various monetary conditions on hospitality stock returns is a general finding rather than a unique to Taiwan, this study investigates hospitality stock performance across different monetary policy periods in Hong Kong.

The Hong Kong stock market was founded in 1891, and consists of the Main Board and the Growth Enterprise Market (GEM). There were 975 listed companies on the Main Board and 198 listed companies on the GEM at the end of 2006. According to the World Federation of Exchanges (2006), the Hong Kong stock market ranked third in terms of total equity funds raised, and in terms of size (market capitalization). The Hong Kong stock market also ranked sixth among members of the World Federation of Exchanges, and was ranked second in Asia, after the Japanese stock market. With strong economic growth in mainland China and the high internationalization of the Hong Kong stock market, large amounts of foreign capital flow into this stock market. The Hong Kong stock market has become an important international financial channel. The Hong Kong Tourism Bureau (HKTb, 2002) reported that Hong Kong's strategic location as the natural gateway to both Asia and China offers enormous advantages, such as being the international gateway to mainland China and the first-choice destination for travelers from China. Alan and McKercher (2002) pointed out that US and Australian residents frequently used Hong Kong as a trip gateway, especially to China, and the residents of China also used Hong Kong as a trip egress destination. According to the annual report of the HKTb (2004), about 21.81 million tourists visited Hong Kong in 2003, about 56% of whom came from China. The relaxation in travel restrictions in 2002 and a huge demand for outbound travel in Mainland China continues to provide extraordinary opportunities for Hong Kong's tourism industry (HKTb, 2003).

The World Tourism Organization (2006) also reported that the total number of international tourist arrivals to Hong Kong reached 14.8 million, and tourism receipts were 10.2 billion US dollars in 2005, which ranked number three and four, respectively, in Asia. These positive trends can create boundless opportunities for the hospitality industry in Hong Kong. In consequence, the hospitality stocks in Hong Kong offer a good case study and the results can shed light on the critical impact of different monetary policy regimes on hospitality stock performance. Moreover, this study offers hospitality stock investors an explicit and practical stock market timing investment strategy to allocate their portfolios in response to shifts in the monetary policy movements. Hospitality stock investors can significantly improve investment performance based on this market timing investment strategy.

The remainder of this paper is structured as follows. Section 2 describes the hospitality stock data and monetary policy variables. Section 3 constructs two risk-adjusted performance measures on hospitality stock returns. Section 4 shows the regression analysis and empirical results. Implications for market timing based on the findings in this study are illustrated in Section 5. Section 6 presents the conclusions and opportunities for future research.

HOSPITALITY STOCK DATA AND MONETARY POLICY MEASURES

The hospitality companies covered in this study needed to have complete data on share price over the 14-year period from August 1992 to August 2006. Based on this selection criterion, we selected ten hospitality-related firms in four sectors (one airline, six hotels, two restaurants and one tourism firm). All ten companies were traded on the Main Board. The sample firms in the four hospitality sectors include one airline company, six hotels, two restaurants and one tourism firm. Their monthly stock prices of sectors from August 1992 to August 2006 (169 monthly observations) are taken from the Datastream database. We then computed the value-weighted stock price index (SI) and stock returns (SR) for each sector: $SR_t = \ln(SI_t/SI_{t-1}) \times 100$, where SI_t and SI_{t-1} are stock prices at the end of the month t and $t-1$ respectively. Table 1 provides descriptive statistics of the monthly returns of each hospitality sector as well as the monthly market returns (i.e. the Hang Seng Index returns). The four hospitality sectors had lower returns, higher standard deviations and reward-to risk ratios than did the Hang Seng Index.

As mentioned, we use changes in discount rate to measure changes in the monetary policy. The discount rate is the interest rate that the central bank charges banks when the central bank provides reserves to the banking system by making discount loans to banks. The central bank can conduct monetary policies by regulating discount rates. If the central bank intends to pursue a restrictive monetary policy, the central bank would raise the discount rate. An increase in discount rate can weaken a company's stock performance for the following two reasons. First,

firms need to pay more for discount loans and thus lower corporate earnings. Second, a rise in the discount rate makes a firm's corporate cash flows worth less based on the stock valuation model.

Table 1
Summary Statistics of Stock Returns

Sector	Mean	Maximum	Minimum	Standard deviation	Reward ratio
<i>Hotel</i>	0.12	39.93	-49.70	10.24	0.01
Airlines	0.20	33.57	-28.61	10.00	0.02
Restaurant	-0.36	52.70	-56.44	13.30	-0.03
Tourism	0.62	52.69	-59.60	15.17	0.04
<i>Hang Seng Index</i>	0.64	26.45	-34.82	7.87	0.08

The Hong Kong Monetary Authority (HKMA) discount rate data from August 1992 to August 2006 were taken from the Taiwan Economic Journal (TEJ) database. Table 2 presents the summary information on the discount rate change series. As shown in Table 2, the HKMA changed the discount rate 45 times, raising it 27 times and lowering it 18 times, during the full sample period. To measure different monetary policy months, we compute rate change series. Accordingly, we categorize the entire sample period (169 months) as either restrictive or expansive months. An expansive monetary condition is characterised by the period with a decrease in the discount rate, whereas a restrictive monetary environment is associated with the period with an increase in the discount rate.

Table 2
Discount Rate Changes Series: 8/1992- 8/2006

Series	Increasing or Decreasing	First rate change in series	Rate changes in series	Monthly observations in series
1	Decreasing	8/1992	1	20
2	Increasing	5/1994	3	20
3	Decreasing	2/1996	1	12
4	Increasing	3/1997	2	17
5	Decreasing	9/1998	3	9
6	Increasing	7/1999	6	17
7	Decreasing	1/2001	13	41
8	Increasing	7/2004	16	25

Note: A series is identified when a sequence of consecutive rate changes is in the same direction. Seven months in which the direction of a rate change is reversed are dropped.

Furthermore, the months remain under the same monetary policy environment until a month in which a discount rate change in the opposite direction is detected. The months with the first rate changes in a series are omitted from the sample because the months that mark the initiation of a new monetary condition cover both expansive and restrictive days. As a result, eight months are removed from the full sample observations and 161 months remain; 82 months follow discount rate decreases and 79 months follow discount rate increases.

HOSPITALITY STOCK PERFORMANCE UNDER VARIOUS MONETARY POLICY ENVIRONMENTS

Table 3 shows the mean returns and the standard deviations of monthly stock returns under two different monetary periods. The data indicate that all stocks have greater mean returns during expansive monetary periods than during restrictive periods. Among them, the difference in the mean return over two different monetary conditions is 3.12% for hotel stocks, and 4.12% for tourism stocks, which are statistically significant differences in their means at the 5% and 10% levels, respectively. These findings illustrate that hotel and tourism stocks performed significantly better under an expansive monetary environment.

The standard deviations of market and hospitality stock returns (except for the returns of airline stocks) are higher in the restrictive monetary period than in the expansive period. In other words, hotel, restaurant and tourism stock returns are more volatile under a restrictive monetary condition. The difference in standard deviations of hotel, restaurant and tourism stock returns between the two monetary environments is statistically significant.

Moreover, the Sharpe ratio (reward-to-total risk ratio) and Treynor ratio are used to evaluate the risk-adjusted performance of hospitality and market returns over the full sample and both expansive and restrictive periods. The Sharpe ratio is given as:

$$\text{Sharpe index} = \left(\frac{\overline{SR}_i - \overline{R}_f}{\sigma_i} \right), \quad (1)$$

where \overline{SR}_i is the mean annualized return, \overline{R}_f is the mean risk-free rate and σ_i is the standard deviation of the annualized returns. Taken from the TEJ database, the monthly series of the one-year time deposit rate is used as the risk-free rate R_f . The Sharpe index of hotel stock returns is -2.05 over the entire sample period, -15.02 during the restrictive period, and 15.78 during the expansive period. The Sharpe indices of all four hospitality sectors are positive under an expansive monetary environment and negative under a restrictive monetary environment.

Table 3
Mean Returns and Standard Deviations of Monthly Stock Returns

Mean return	Expansive period	Restrictive period	Difference in means	<i>t</i> -statistics (<i>p</i> -value) for difference in means
	1.62	-1.50	3.12	1.92 (0.05)**
<i>Hotel</i>				
Airlines	0.74	-0.21	0.95	0.61 (0.54)
Restaurant	0.67	-1.87	2.54	1.20 (0.23)
Tourism	2.46	-1.66	4.12	1.70 (0.09)*
	1.06	0.15	0.91	0.72 (0.47)
<i>Hang Seng Index</i>				
Standard deviation	Expansive period	Restrictive period	Difference in standard deviations	<i>F</i> -statistics (<i>p</i> -value) for difference in standard deviations
	8.18	12.16	3.98	2.21 (0.00)***
<i>Hotel</i>				
	10.06	9.73	-0.33	1.07 (0.76)
<i>Airlines</i>				
	12.16	14.75	2.59	1.47 (0.09)*
<i>Restaurant</i>				
	12.43	17.57	5.14	2.00 (0.00)***
<i>Tourism</i>				
	7.75	8.21	0.46	0.06 (0.60)
<i>Hang Seng Index</i>				

Note: The data exclude months of reverse changes in the monetary policy. * Significant at the 10% level. ** Significant at the 5% level. *** Significant at the 1% level.

The Treynor index measures the reward-to-systematic risk ratio and is given as:

$$\text{Treynor index} = \left(\frac{\overline{SR}_i - \overline{R}_f}{\beta_i} \right) \quad (2)$$

where \overline{SR}_i is the mean annualized hotel stock return, \overline{R}_f is the mean risk-free rate and the β value is estimated using the capital asset pricing model (CAPM) in Eq. (3):

$$SR_{i,t} - R_{f,t} = \alpha_i + \beta_i (R_{m,t} - R_{f,t}) + \varepsilon_{i,t}, \quad (3)$$

where SR_i is the annualized stock return for sector i , R_m is the annualized market return and ε_i is the residual term. The Treynor indices of all four hospitality stock returns are positive under the expansive monetary environment and negative under the restrictive monetary environment.

In conclusion, Sharpe and Treynor values of hotel stocks are positive only in the expansive monetary environment, implying that hotel stocks offer a better reward per unit of risk in expansive periods. Further, negative Sharpe and Treynor indices of hotel stock returns in restrictive periods imply that hospitality stock investors could have achieved better investment performance simply by holding risk-free assets instead of hotel stocks during restrictive monetary periods. Similar results are detected for the airlines, restaurants, tourism and market index.

REGRESSION TESTS AND RESULTS

To examine the link between stock returns and changes in the monetary policy, we run the regression of stock returns on the monetary policy dummy variables according to the following equation:

$$SR_i = \alpha_0 + \alpha_1 DR_HK + \mu_i, \quad (4)$$

where SR_i is the monthly hospitality or market returns, DR_HK is the dummy variable for changes in the discount

Sector	Hotel	Airline	Restaurants	Tourism	Hang Seng Index
<i>Constant</i>	1.62 (1.88)*	0.74 (0.71)	0.67 (0.43)	2.46 (1.74)	1.06 (1.16)
<i>DR_HK</i>	-3.12 (-2.21)**	-0.96 (-0.62)	-2.54 (-1.14)	-4.12 (-1.63)*	-0.91 (-0.72)
<i>F-statistic</i>	3.70	0.38	1.44	2.89	0.53
<i>[p-value]</i>	[0.05]**	[0.54]	[0.23]	[0.10]*	[0.47]
\bar{R}^2	0.016	0.002	0.003	0.012	0.003

rate in HK, which takes a value of one during restrictive monetary periods and zero during expansive monetary periods. The approach of Newey and West (1987) was used to attain consistent estimates by correcting for the possible presence of autocorrelation and heteroscedasticity in Eq. (4). The regression results are shown in Table 4.

Table 4

Regression results of reurns on dummy variable of changes in discount rate

Note: Figures in parentheses are Newey and West (1987) corrected t -statistics. The data excludes months of changes in the monetary policy. \bar{R}^2 is the adjusted R^2 . * Significant at the 10% level. ** Significant at the 5% level. *** Significant at the 1% level.

Over the full sample period from August 1992 to August 2006, the coefficient of the dummy variable of changes in the discount rate DR_HK is significantly negative for hotel and tourism stock returns, but is not statistically significant for airline, restaurant and market returns. These findings imply that changes in the HKMA discount rate have a significant impact on hotel and tourism stock returns, but not on airline, restaurant and market returns. The negative coefficient of the DR_HK dummy variable indicates that restrictive monetary conditions are significantly associated with lower hotel (tourism) stock returns, whereas hotel (tourism) stocks experience higher returns in expansive monetary periods.

To further control for the possible impact of other variables on the relationship between monetary policy dummy variable and stock returns, we added four macroeconomic factors and three non-macroeconomic events into Eq. (4) and perform the following multiple regression equation:

$$SR_i = \lambda_0 + \lambda_1 \Delta MS_i + \lambda_2 \Delta UEP_i + \lambda_3 \Delta EX_i + \lambda_4 EINF_i + \lambda_5 DR_HK + \lambda_6 D911 + \lambda_7 D1997 + \lambda_8 DSARS + e_i, \quad (5)$$

where MS, ENIF, UEP, EX denote growth rate of money supply, inflation rate, changes in unemployment rate and percentage changes in exchange rate. Three dummy variables D1997, D911 and DSARS represent three recent non-macroeconomic forces, the takeover of Hong Kong in June 1997, the terrorist attacks of September 11, 2001 in the US and the Severe Acute Respiratory Syndrome (SARS) outbreak in March 2003, respectively. Three

non-macroeconomic event dummy variables take the value of one during the corresponding month on the event date and zero otherwise.

Empirical results further illustrate that the negative influence of the dummy variable DR_HK remains significant after macroeconomic factors and non-macroeconomic event dummy variables are added into the regressions. Moreover, all three non-macroeconomic variables had significant effects on market and four hospitality stock returns. Returns were most seriously hurt by the SARS outbreak, followed by the 9/11 terrorist attacks. The negative impact of the SARS outbreak on the four sectors is -14.99, -14.64, -12.21 and -26.87 respectively, and higher than that of the Hang Seng Index. The takeover of Hong Kong had a positive impact on Hong Kong's hospitality stock returns. These findings are consistent with results in Chen et al. (2005) and Chen (2007b). Chen et al. (2005) and Chen (2007b) found that political events, the 9/11 terrorist attacks in the US and the SARS outbreak also had a significant influence on hotel stock returns in Taiwan and China, respectively.

IMPLICATIONS FOR THE MARKET TIMING STRATEGY

In an effort to achieve the high rewards, stock investors employ a variety of investment strategies. One popular approach is market timing, the attempt to anticipate future market movements and then allocate the investment portfolios based on the prediction. In this study, hotel and tourism stocks have a higher mean return and lower standard deviation under the expansive monetary environment, implying that a restrictive monetary condition is significantly associated with lower hotel and tourism stock returns, whereas hotel and tourism stocks experience higher returns during an expansive monetary period.

Moreover, both the Sharpe and Treynor ratios of hotel and tourism stocks are positive during expansive monetary months, but negative during restrictive monetary months, meaning that the risk-free asset even outperforms the hotel and tourism stocks under the restrictive monetary policy period. These findings suggest that hospitality stock investors can allocate their portfolios between hospitality stocks and risk-free assets according to different movements in monetary policy environments.

Consequently, we suggest that hospitality stock investors invest in hotel or tourism stocks during the expansive monetary period, but invest in risk-free assets during the restrictive monetary period. In other words, hospitality stock investors hold hotel or tourism stocks during the months with a decrease in the discount rate, whereas shift their investment holding to risk-free assets during the months experiencing an increase in the discount rate.

Table 5
Stock performance results with and without using the market timing strategy

Panel A: No market timing	Hotel	Tourism	Hang Seng Index
Mean annual return	1.41%	7.46%	7.97%
Standard deviation	123.07%	182.07%	94.64%
Reward ratio	0.01	0.04	0.08
Panel B: Market timing	Hotel	Tourism	Hang Seng Index
Mean annual return	12.31%	16.71%	9.06%
Standard deviation	67.44%	103.59%	64.48%
Reward ratio	0.18	0.16	0.14

Table 5 summarizes the investment results with and without using the market timing strategy based on changes in the monetary policy. As shown in Panel A of Table 9, without considering the market timing strategy, the average of annualized hotel, tourism and market returns is 1.41%, 7.46% and 7.97%, respectively. The corresponding standard deviation is 123.07%, 182.07% and 94.64%. Thus, the reward ratio is 0.01, 0.04 and 0.08, respectively. These results illustrate that the market index outperforms hotel and tourism stocks. Panel B reports stock performance results using the market timing strategy. The average annual returns of hotel, tourism, and the Hang Seng Index are 12.31%, 16.71% and 9.06%, and the standard deviations are 67.44%, 103.59% and 64.48%,

respectively. As a result, the reward ratio is 0.18, 0.16 and 0.14, respectively. Apparently, the hotel and tourism stock performance significantly improves in terms of higher mean returns, lower risk and higher reward ratios. Specifically, the mean return of hotel and tourism stocks increases by 10.9% and 9.21% and risk is reduced by approximately 56% and 78%, respectively. In addition, hotel and tourism stocks outperform the market index.

CONCLUSIONS AND FUTURE RESEARCH

This paper examines the hospitality stock performance under two different monetary policy regimes in Hong Kong. In general, stocks of three of the four sector of hospitality firms (six hotels, two restaurants, and one tourism company) exhibit a higher mean return and lower standard deviation under an expansive monetary policy environment. The one exception is the airline sector. Especially, the differences in means and standard deviation of hotel and tourism stock returns during expansive and restrictive monetary policy periods are statistically significant.

Regression results indicate a significantly negative coefficient of the dummy variable of changes in the discount rate on hotel and tourism stock returns, and hence support that changes in monetary policy environments have a strong influence on hotel and tourism stock performance. The significant effects of changes in monetary policy on hotel and tourism stock returns remain robust even after four macroeconomic factors and three non-macroeconomic event dummy variables are added into regression test equations. The findings in this study are also consistent with empirical evidence documented for the emerging Taiwanese hotel stocks (Chen 2007a).

Furthermore, the Sharpe and Treynor indexes of hospitality stocks are positive and relatively high during expansive monetary months, but negative during restrictive monetary months. This implies that the risk-free assets outperform the hospitality stocks under the restrictive monetary policy condition. We hence explicitly provide hospitality stock investors a simple and useful market timing investment strategy based on changes in discount rate in Hong Kong. This strategy suggests investing in hotel and tourism stocks during expansive monetary policy months and holdings risk-free assets during restrictive monetary months. Hospitality stock investors following this market timing investment strategy can significantly improve the investment performance by achieving higher returns and lower risk.

Lastly, Hong Kong has been a special administrative region of the People's Republic of China since 1997. After the Closer Economic Partnership Arrangement (CEPA) was endorsed by the government of the Hong Kong special administrative region and the central people's government of the People's Republic of China in 2003, the travel restrictions between China and Hong Kong have been relaxed and the economic activities between the two regions have increased. We anticipate that more travelers from China will visit Hong Kong and more foreigners will use Hong Kong as the gateway to China. Hong Kong's tourism firms stand to benefit from the expansion of tourism. However, owing to its close link with US dollars exchange rate mechanism, the People's Bank of China (PBC) does not change the discount rate very often. Therefore, we find that changes in the discount rate of PBC have no significant impact on hospitality stock returns in Hong Kong. Future research can examine whether changes in PBC monetary policy have a significant effect on hospitality stocks in Hong Kong when the PBC conducts a more independent monetary policy.

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DOES INTANGIBLE CAPITAL MATTER IN THE CHOICE OF FOREIGN MARKET ENTRY MODE IN THE LODGING INDUSTRY?

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ABSTRACT

With the traditional Resource Based View approach to entry mode, this paper investigates intangibles at the firm level and their impact on the choice of foreign market entry mode to understand how to create value overseas. From the Multinomial logistic regression analyses with data collected from the lodging industry (1995 – 2005), the results reveal that as market capital increase, entry mode seems to move from acquisition to joint venture to Greenfield to contractual modes while as human capital increases, entry mode tends to move from joint venture to acquisition to Greenfield to contractual modes. This finding is little different from the results reported in manufacturing industry.

Key Words: Resource Based View, entry mode, lodging industry, intangibles.

INTRODUCTION

Along with the deregulation of industries, saturated and highly competitive markets, and lowered trade barriers, international trade in services is growing at a faster rate than in other areas (Stauss & Mang, 1999). Accordingly, intangibles (e.g., market knowledge, management skills, organizational routines, and a firm's brand image and corporate reputation) have supported a greater level and breadth of a firm's activity than tangible resources (Cloninger, 2004). Many scholars have revealed that intangible assets are the most important factors that determine the success of their expansion into international markets (Dunning, 1993; Caves, 1982). However, possessing only high value of intangible assets may not be enough for the success of a firm's international expansion due to the transferability and transformability of intangible assets (Aharoni & Nachum, 2000).

Therefore, in order to exploit intangible capital successfully and generate value overseas in the service industry, the decision on where and how to transfer intangible capital across borders is critical. Under these circumstances, another distinctive feature of service, inseparability, must be considered (Zeithaml et al., 1985) since it causes a transferable problem in international operations. In addition, human capital intensity in the service industry creates problems in the control and coordination of international activities (Reardon et al., 1996). Such unique characteristics of service have important implications for entry mode decisions that affect the flexibility, development, and adjustment of firm resources in the long run.

A number of studies have compared different choices of entry mode between the manufacturing industry and retail or service industry. The results of these studies are mixed. Some suggest that the entry mode decision can be time-dependent and thus, international service firms did not follow a sequential stage initiated by exporting like a goods manufacturer. This may be due to inseparability of services (Gronroos, 1999) and the nature of high human capital intensity (Lovelock & Yip, 1996). According to Anand and Delios (1997), subsidiaries in retail sectors, where the service factor is high, more frequently enter the market by acquisitions and Joint venture (JV), and employed more local employees, while subsidiaries in the wholesale sector have a greater incidence of Greenfield entry (e.g., Greenfield investment require a firm to create all assets from the scratch) and employ more expatriates. On the other hand, Bouquet et al., (2004) revealed that a firm that must develop capabilities through close contact with customers (inseparability) and customization skills (high human capital intensity) prefers to enter the market by wholly owned subsidiaries (WOS).

Based on the findings of previous studies, this study employs the resource-based view (RBV) to examine issues of intangible capital of lodging firms and their impact on the choice of international entry mode. The objective of the study is to determine which entry mode is the most appropriate, and whether there is a sequential entry mode.

LITERATURE REVIEW

Outputs of service firms are often based on intangible assets (e.g., knowledge, skills, & brand) and service firms can leverage a brand and knowledge-based skills to earn relatively higher returns and achieve economies of scale or scope from overseas (Cloninger, 2004). In other words, a firm with more intangibles has more opportunity to enter the new market and develop a loyal customer base. More importantly, intangible value does not diminish when exploiting it in a new market (Lev, 2004). Entry into the international service market requires transferring intangible resources to new locations. Empirical research shows that firms with distinctive intangible capital such as technology and firms investing more in technology can tap into foreign markets and achieve greater profitability gains (Dunning, 1998). However, evidence from the effect of other intangible capitals such as marketing skills and managerial intangibles on the performance of international firms is still mixed and less complete.

Operationalization & Measurement of Intangible Capital:

It is extremely difficult to determine a company's intangibles due to the failure of companies to disclose their intangible information. Many intangibles such as employee training, information technology, and brand creation are generally aggregated with other expenses in financial reports. By considering this fact and the lodging industry characteristics, the current study focuses on (1) market capital (External capital) and (2) human capital (Internal capital). **(1) Market Capital** is operationalized brand value. In the hotel industry, branding is an important marketing tool and has become a cornerstone of hotel chains' strategies. In this study, brand value is measured by advertising expenses, sales and general administration expenses, number of outlets, and number of customers (LaFontaine, 1994, 1997; Sunil et al., 2004).

(2) Human Capital: Knowledge-based assets are also easily exploited in various locations at little or no additional cost (Caves, 1971). However, knowledge transfer requires transfer of whole routines and procedures that are often difficult and time-consuming (Martin et al., 1995). As the transferability of knowledge is also part of a firm's resource, the current study considers it as an important human capital, which is operationalized as employees' efficiency and employers' efficiency as a proxy for human capital. Employee Efficiency is measured by the ratio of number of employees to sales and Employer Efficiency is measured by the ratio of number of Top Executives to sales. This measurement is a modification of Bassi et al.'s (1999) human capital measurement.

Theoretical Background – Resource Based View (RBV):

According to RBV, a firm's resources that are rare, valuable, imperfectly imitable, and not substitutable determine its sustainable competitive advantage (Barney 1986), indicating that a firm's own resources are the starting point for the firm's strategy formulation (Isobe, Makino, & Montgomery 2000; Ekeledo et al., 1999). According to Erramilli, Agarwal, and Dev (2002) choice of entry mode is based upon a firm's competitive advantage and transferability of its resources to the host country. When a firm has the ability to transfer its market resources and production resources, it tends to use the contract mode. However, when a firm is able to transfer only one resource, then it prefers to use joint venture, whereas when a firm is unable to transfer any resources, then it prefers to use Wholly Owned Subsidiary (WOS).

Entry Mode considered in this study:

This study tests different types of entry modes which can be explained by two dimensions: ownership mode and establishment mode, which include Greenfield JV, Greenfield WOS, partial acquisition, and full acquisition. These involve equity investments by multinational corporations. In this study, both Greenfield JV and partial acquisition are considered as one type of entry mode, JV. This study also tests contractual modes, both franchising and management contract, that involve minimal and no equity investment by the multinational corporation.

HYPOTHESES

Relationships between JV & Acquisition and Intangibles:

A firm with stronger intangibles tends to choose acquisitions over JV, especially in the service industry where service transactions require specialized human skills and high human capital intensity (Kogut & Zander,

1993). Human capital is difficult to codify and transmit across organizational boundaries (Reardon et al., 1996). Thus, to provide consistent service, many service firms that require high human capital intensity prefer to use WOS rather than JV (Bouquet et al., 2004). In addition to the problem of the imperfect transferability of human capital, the risks of appropriation and dissemination of human capital as well as the free-riding problem of intangibles make WOS more attractive than JV (Murray & Kotabe, 1999).

By considering the above information, this study assumes that a lodging firm with lower intangibles (both market capital and human capital) is likely to enter the international market by JV, while a firm with higher intangibles (both market capital & human capital) are likely to enter the market by acquisition. Based upon this information, the following hypotheses are presented.

H1: A firm that possesses a high level of market capital (external: brand value) will be more likely to establish acquisition rather than Joint Venture.

H2: A firm that possesses a high level of human capital (internal: the ability to transfer knowledge) will be more likely to establish Acquisition rather than Joint Venture.

Relationship between Acquisition & Greenfield and Intangibles

Compared with Greenfield investment, acquiring an existing firm in a host market will reduce the risk of uncertainty for foreign firms (Caves, 1982). However, acquisition takes considerable time to deploy existing capabilities in the host country as well as internalize new capabilities (Makino & Delios, 1996). Additionally, compared to transferring physical properties across firms, complete takeover of intangible assets requires the seller's full cooperation (Chi, 1994). More importantly, there is the issue of a possibly defective acquisition contract and the difficulty of completely transferring intangible assets due to the problem of information asymmetry and opportunism (Williamson, 1985).

In contrast to acquisition, Greenfield investment results in a stronger managerial attachment between parent and subsidiary managers. Therefore, when a firm transfers organizational routines, Greenfield is a more efficient mode of entry (Cho & Padmanabhan, 1995). With regard to intangibles, Brouthers and Brouthers (2000) find that a firm with strong intangible capabilities can leverage its capabilities more through Greenfield. Doukas et al. (1997) also argue that a firm that already possesses strong capabilities does not have an incentive to use acquisition, and thus enters the international market by Greenfield. Accordingly, the following hypotheses are presented.

H3: A firm that possesses a high level of market capital (external: brand value) will be more likely to establish Greenfield rather than acquisition.

H4: A firm that possesses a high level of human capital (internal: the ability to transfer knowledge) will be more likely to establish Greenfield rather than acquisition.

Relationships between Greenfield & Contractual Mode and Intangibles

Hotel businesses that require employing a large proportion of downstream employees but fewer upstream employees are largely involved in franchising. Kotabe et al., (1998) argue that the relatively higher tacitness encourages a firm to take WOS over licensing to protect its reputation as well as to easily articulate and transfer its own intangibles to other locations (Szulanski, 1996). In this sense, if a company does not require highly skilled employees, licensing would be better than WOS. However, franchisors have to have strong managerial resources to attract franchisees and thus generate benefits (LaFontaine, 1997). When many hotels franchisors find it difficult to enforce rules to internalize intangible spillovers for their franchisees or there are overall problems of consistency, they increase the proportion of the company-owned outlets (Carman & Langeard, 1980)

In the hospitality industry, management contract can also be an effective entry mode since it has high levels of control compared with other entry modes (Palmer & Cole, 1995). Compared with management contract, a firm that enters by Greenfield can more readily leverage these capabilities (Brouthers & Brouthers, 2000). However, when the absorptive capacity of the local market is higher, a firm may use the management contract rather than WOS. On the other hand, when the local market's absorptive capacity is low, Greenfield would be better. This indicates that a firm's human capital can affect the choice between management contract and Greenfield. Previous literature also indicates that a firm possessing high level of tacit knowledge (customer service) favors the management contract relative to franchising or JV to be able to effectively transfer its tacit competitive advantage

(Olsen et al., 1998). Especially in the lodging industry where marketing skills and network activities are highly demanded, the management contract relative to other ownerships has been a preferable entry mode since 1990.

According to the RBV approach, if there is a higher likelihood of the establishment of competitive advantages in the host market and resources are transferable to the host country, franchising or management contract can be used. Franchising is preferable when the key marketing and production knowledge is codifiable and easier to transfer, while management contract is preferable when knowledge is difficult to codifiable. From the above information, this study assumes that when a firm's intangibles increase, the entry mode will move from Greenfield to contractual modes (franchising or management contract). In addition, this study assumes that a firm possessing higher value of intangibles may tend to enter market by management contract rather than franchising.

Comparing Contractual Mode vs. Greenfield

H5: A firm that possesses a high level of market capital will be more likely to establish Contractual modes over Greenfield.

H6: A firm that possesses a high level of human capital (internal: the ability to transfer knowledge) will be more likely to establish contractual modes over Greenfield.

Comparing Franchising vs. Management Contract

H7: A firm that possesses a high level of market capital will be more likely to establish management contract over franchising.

H8: A firm that possesses a high level of human capital (internal: the ability to transfer knowledge) will be more likely to establish management contract over franchising.

Sequential Entry Modes into the International Market

If the findings of this research confirm the above eight hypotheses, then we can assume that entry into the international market by U.S. hospitality firms follows a sequential process from JV to acquisition to Greenfield to franchising to management contract as the level of intangible capital increases.

METHODOLOGY

To test the posited research hypotheses, this study selects the U.S. international hospitality companies that have at least one subsidiary in the international market. The sample frame derived from Compustat is matched with the sample frame from Mergent Data Base. This matching process yields ten companies: *Choice Hotels International Inc, Gaylord Entertainment Co, Great Wolf Resorts Inc, Hilton Hotel Corp, Interstate Hotels & Resorts, Lodgian Inc, Marriott International Inc, Morgans Hotel Group Co, Sonesta International Hotels, and Starwood Hotels & Resort World*. The actual sample of this study is each case of foreign market entry mode of the selected companies between 1995 & 2005. Then each case of foreign market entry of the selected ten companies between 1995 and 2005 is counted and then three companies – Gaylord Entertainment Co (3 entries), Great Wolf Resort Inc (3 entries), & Morgans Hotel Group Co (3 entries) are dropped from the sample pool due the small numbers of entries into the international market. Also, if the selected firm used two different entry modes at one time, it is not counted in this study. The final sample for this study is 284 (N = 284).

Variables

(1) Independent Variables : Market Capital (measured by advertising expenses, sales and general administration expenses, the number of properties, and the number of customers) and Human Capital (measured by employee efficiency and employer efficiency). **(2) Dependent Variable:** Choice of entry mode (acquisition, joint venture, franchising, Greenfield, management contract). Two categories of foreign direct investment: acquisitions and JV are collected by using the Securities Data Companies (SDC). Greenfield, franchising, & management contract are collected from the 10-K reports of the selected companies. **(3) Control Variables:** Name of the Companies, Area entered, and Year of Entry Mode.

Testing the Control Variables (Company Name, Year, & Area)

It is important to measure and exclude *Company Name*, *Area entered*, and *Year* (from 1995 to 2005) on the choice of entry mode in order to measure accurately the effect of intangible capitals on the choice of entry mode. *Company Name* is found to significantly affect the choice of entry mode, especially between franchising and management contract ($p=0.034$). The effect of *Year* on the choice of entry mode is found to be significant in the

case of the choice between joint venture and management contract. When *the number of years* increases, a firm is more likely to enter the market by management contract rather than joint venture. As the *number of years* increases, a firm is more likely to enter the market by management contract rather than Greenfield ($p = 0.23$).

U.S. lodging companies initially tend to enter the foreign market in locations that are geographically closest to the U.S., such as Canada and Mexico, and then expand their operations into other locations, from South America to Europe, the Caribbean, Australia, Asia, and the Middle East. Accordingly, *Area* is found to affect the choice of entry mode. More specifically, when a company enters areas where that are geographically far from the U.S., a firm is more likely to enter the market by franchising rather than any other entry mode.

Testing Hypotheses H1 and H2

By considering the above results, H1 (*A firm that possesses a high level of market capital will be more likely to establish Acquisition rather than JV*) and H2 (*A firm that possesses a high level of human capital will be more likely to establish Acquisition rather than JV*) are tested. The results of the logistic regression show that as *Advertising Expenses*, *number of properties*, and *number of customers* increase, a firm tends to enter the market by JV rather than Acquisition. Accordingly, H1 is rejected, confirming the traditional RBV approach to entry mode. On the other hand, testing H2, a firm with higher *Employee Efficiency* tends to enter the market by Acquisition. Even if the effect of *Employer Efficiency* on the choice between Acquisitions vs. JV is not significant, a firm that has high *Employer Efficiency* is more likely to enter the market by Acquisition rather than JV. Accordingly, H2 is supported, but this result is contradicted with the traditional background of the RBV to entry mode.

Table 1
Results of Logistic Regression testing H1 & H2

Acquisition vs. JV	B	Std. Error	Wald	Sig.	Exp(B)
Advertising expenses	.133	.543	.060	.806	1.143
Sales & General Administration expenses	-4.953	1.776	7.778	.005	.007
Number of Property	3.275	1.093	8.973	.003*	26.452
Number of Customers	42.420	19.196	4.884	.027*	26.471
Top managers' efficiency	-.002	.217	.000	.993	.998
Employees' efficiency	-1.127	.486	5.382	.020*	.324

Table 2
Results of Testing H3 & H4

Acquisition vs. Greenfield	B	Std. Error	Wald	Sig.	Exp(B)
Advertising expenses	-.464	.513	.816	.366	.629
Sales & General Administration expenses	-3.911	1.978	3.912	.048*	.020
Number of Property	1.719	.867	3.932	.047*	5.577
Number of Customers	1.860	4.304	.187	.666	6.426
Employee efficiency	-2.778	.970	8.197	.004*	.062
Top Manager efficiency	1.954	.662	8.720	.003*	7.054
JV vs. Greenfield	B	Std. Error	Wald	Sig.	Exp(B)
Advertising expenses	-.597	.473	1.597	.206	.550
Sales & General Administration expenses	1.042	1.254	.690	.406	2.834
Number of Property	-1.557	.684	5.180	.023*	.211
Number of Customers	-40.560	18.992	4.561	.033*	2.43
Employee efficiency	-1.651	.990	2.780	.095	.192
Top Manager efficiency	1.955	.660	8.790	.003*	7.067

Testing H3 and H4

From testing H3 (*a firm that possesses a high level of market capital will be more likely to establish a Greenfield rather than Acquisition*), when a firm spends more in *Advertising expenses*, the firm tends to enter the market by Greenfield over Acquisition. Also, a firm that has a high number of properties tends to enter the market by Greenfield rather than Acquisition. Therefore, H3 is supported. In testing H4 (*A firm that possesses a high level of human capital will be more likely to establish Greenfield rather than Acquisition*), both *employee efficiency* and *top managers' efficiency* is found to significantly affect the decision between Acquisition and Greenfield.

Interestingly, there is a reverse effect of these variables on the choice between Acquisition and Greenfield. A firm with *high employee efficiency* tends to enter by Acquisition rather than Greenfield, whereas a firm with *high top managerial efficiency* tends to enter by Greenfield rather than Acquisition. Therefore, H4 is partially supported. We also find similar results in the choice between JV and Greenfield, indicating that higher *employee efficiency* makes JV more attractive, while *higher top managers' efficiency* makes Greenfield more attractive when entering the international market.

Testing H5 and H6

In testing H5 (*A firm that possesses a high level of market capital will be more likely to establish Contractual Modes over Greenfield*), as a firm's *Advertising expenses*, *the number of properties*, and *the number of customers* increase, the firm tends to use Contractual Mode over Greenfield. More specifically, as a firm spends more on *Sales & General administration expenses* and as *the number of customer* increases, a firm tends to enter the market by Franchising rather than Greenfield. In the decision between Greenfield and Management Contract, the number of customers is found to be an important factor, indicating that as *the number of customer increases*, the firm tends to enter the market by Management Contract rather than Greenfield. Accordingly, H5 is supported.

Table 3
Results of Testing H5 & H6

Greenfield vs. Contractual Mode	B	Std. Error	Wald	Sig.	Exp(B)
Advertising expenses	.753	.359	4.411	.036	2.124
Sales & General administration expenses	-1.324	.747	3.142	.076	.266
Number of Properties	.753	.380	3.934	.047 *	2.123
Number of Customers	23.727	8.216	8.341	.004*	20.1
Greenfield vs. Franchising	B	Std. Error	Wald	Sig.	Exp(B)
Advertising expenses	-2.087	1.877	1.235	.266	.124
Sales & General administration expenses	4.938	3.882	1.618	.203	139.454
Number of Property	-2.821	1.623	3.020	.082*	.060
Number of Customers	-104.483	64.329	2.638	.104	420
Employee efficiency	1.953	.945	4.271	.039	7.049
Top Manager efficiency	-2.052	.649	10.001	.002	.128
Greenfield vs. Management Contract	B	Std. Error	Wald	Sig.	Exp(B)
Advertising expenses	.701	.368	3.635	.057	2.016
Sales & General administration expenses	.076	1.662	.002	.964	1.079
Number of Property	.280	.780	.129	.720	1.323
Number of Customers	16.232	7.648	4.504	.034* *	112
Employee efficiency	1.168	.967	1.459	.227	3.216
Top Manager efficiency	-2.003	.653	9.420	.002	.135

In testing H6 (*A firm that possesses a high level of human capital will be more likely to establish Contractual Modes over Greenfield*), when *employee efficiency* increases, a firm tends to enter the market by Franchising rather than Greenfield. On the other hand, when *managers' efficiency* increases, a firm tends to enter the

market by Greenfield rather than Franchising. In the choice of entry between Greenfield and Management Contract, as *employees' efficiency* increases, a firm tends to enter the market by Management Contract rather than Greenfield, although this finding was not significant. On the other hand, a firm with high *top managers' efficiency* tends to enter by Greenfield rather than Management Contract. Accordingly, H 6 is partially supported.

Testing H7 and H8

In testing H7 (*A firm that possesses a high level of market capital will be more likely to establish Management Contract over Franchising*), any market capital variables are found to be insignificant, and thus H7 is rejected. In testing H8 (*A firm that possesses a high level of human capital will be more likely to establish Management Contract over Franchising*), when *employee efficiency* increases, a firm tends to enter the market by Franchising rather than Management Contract. On the other hand, when a firm's *top managers' efficiency* increases, a firm enters the market by Management Contract rather than Franchising. The above results suggest that as the level of market capital increases, entry mode seems to move from Acquisition to JV to Greenfield to Contractual Modes, while as the level of human capital increases, entry mode tends to move from JV to Acquisition to Greenfield to Contractual Modes. This is somewhat different from the traditional RBV approach to the entry mode.

CONCLUSION AND DISCUSSION

According to the traditional RBV, when a firm can transfer at least one of its production activities (related to human capital) and marketing activity (which is related to market capital), then that firm tends to use JV, while when a firm cannot transfer both capitals, it tends to use Acquisition or Greenfield. The results of the current study reveal that with reference to the choice of entry mode by Acquisition and Joint Venture, a firm that has relatively higher market intangibles and that is capable of transferring them prefers to enter the market by JV rather than Acquisition, which is consistent with the traditional RBV approach to the entry mode. On the other hand, a firm that has relatively higher human intangibles and that is capable of transferring them prefers to enter the market by Acquisition rather than JV. This result contradicts the traditional RBV approach to entry mode developed in the manufacturing industry. This may be due to the unique characteristics of services, indicating that when human capital intensity and tacitness increase, a firm needs to employ full control mode instead of applying partial control mode.

This study also reveals that Greenfield is more attractive than Acquisition when a firm possesses higher market capital in the lodging industry. This can be explained in a way that compared to Greenfield, Acquisition in the foreign market may result in loss of transferability of intangibles, as it is challenging and time consuming for an acquiring firm to stabilize and standardize sales and service marketing practices in the acquired firm. However, in human capital, when employees' efficiency increases, Acquisition is found to be the preferable mode than Greenfield, whereas when top managers' efficiency increases, Greenfield appears to be the preferable mode. This can be explained by the fact that a firm with higher top manager capability can start a new business in the international market, which can reduce any opportunistic costs derived from Acquisition. On the other hand, a firm with higher employee capability can reduce any complicated managerial and operational problems driven by Acquisition. Also, it becomes easier for a firm to have its own employees understand the acquired company's technology and know-how, and the employees from the acquired firm can learn from each other.

In testing for the entry mode choice between Greenfield and Contractual Mode, it is revealed that a firm possessing higher intangible capital prefers to use Contractual Mode over Greenfield. This is consistent with the traditional RBV approach to the entry mode and explains that a firm possessing higher intangibles doesn't need to physically move its operations to the international markets and invest money to find new locations and build new properties. By selling only brand name and production and services / marketing skills, either by Franchising, or by Management Contract, a firm can gain competitive advantage.

Overall, this study suggests the best choice of entry mode for hotels, depending on their level and type of intangible capital. It can also recommend the type of intangible capital that could be easily transferred to the international market, so as to obtain better returns on investments with particular intangibles. This study also tried to measure new intangible capitals in the lodging industry, which can be useful for hotel managers. Future studies could consider different types of intangibles with reference to entry mode as well as their impact on a firm's value.

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IS INTENTION TO LEAVE THE SAME AS INTENTION TO STAY?

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ABSTRACT

The purpose of the study is to examine whether the predictors which decrease employee intention to leave, will also increase employee intention to stay. Therefore, the objective of the study is twofold, (1) to examine the influence of perceived organizational support, perceived supervisors' support and organizational commitment on intent to leave, and (2) to investigate the influence of the same variables on intent to stay. A total of 416 hospitality employees in the U.S. participated. The results suggest that perceived organizational support and organizational commitment decreased intent to leave while only perceived organizational support had a positive impact on intention to stay.

Key Words: intention to leave, intention to stay

INTRODUCTION

When employees leave an organization, either voluntarily or involuntarily, the impact can be substantial. Turnover has been directly linked to rising employee recruitment and training costs, low levels of employee morale, job satisfaction and customers' perceptions of service quality (Gray, Niehoff & Miller, 2000). Researchers have attempted to uncover key reasons why those in the hospitality industry leave their jobs and have offered recommendations to combat such turnover related issues (Dermody, Taylor & Young, 2004; Hogan, 1992; Schmidgall & Woods, 2001; Stalcup & Pearson, 2005; Woods & Macaulay, 1989). However, our industry continues to hold one of the greatest turnover rates across its segments primarily due to low wages, shift schedules, and social perception of entry-level jobs (Dermody et al., 2004). Despite the amount of research focused on turnover, the issue still continues to dominate as a major problem within the hospitality industry (Woods, 2001). As previous research has focused primarily on turnover related concerns, our study attempts to evaluate key variables predicting employees' *intention to leave* and seeks to determine if these variables will have similar predicting power for their intention to stay.

In general terms, 'intent to leave' is simply referred to as a worker's intention to leave their present organization. This concept is considered interchangeable with the term 'turnover intention'; however, it is distinct from defining actual turnover (Yoshimura, 2003). Specifically, intention to leave refers to the subjective estimation of an individual regarding the probability of leaving an organization in the near future (Mowday, Porter & Steers, 1982). It is considered as a conscious and deliberate desire to leave an organization within the near future and considered as the last part of a sequence in the withdrawal cognition process (Mobley, Horner & Hollingsworth, 1978). On the other hand, intention to stay refers to employees' conscious and deliberate willfulness to stay with the organization (Tett & Meyer, 1993).

Prior research on the determinants of turnover or employee retention does not necessarily distinguish between the effect of the determinants in terms of their impact on intention to stay or intention to leave (Johnston, 1995). It is implicitly assumed that intention to stay and intention to leave are two sides of the same coin. For example, perceived organizational support (POS) was found to be a significant predictor of employees' behavioral intentions, implying that high POS will lead to intention to stay and low POS will lead to intention to leave

(Johnston, 1995). The logic is embedded in consumer behavior literature. For instance, service quality and the determinants of service quality have been extensively researched, and it has been found to have a significant impact on consumer satisfaction. It was assumed that consumer satisfaction and dissatisfaction were two sides of the same coin (i.e. reliability, one of the service quality determinants, was found to be the most important factor by Berry, Zeithaml and Parasuraman (1985) which lead to the implication that reliability will lead to satisfaction and unreliability will lead to dissatisfaction) (Johnston, 1995). However, with time scholars realized the differentiation between consumer satisfaction and consumer dissatisfaction which lead them to identify determinants of satisfaction and dissatisfaction (Cardotte & Turgeon, 1988). It was found that (1) some variables were “dissatisfiers,” when the action (lack of integrity) led to dissatisfaction, however on the contrary, high levels of the action (integrity) did not lead to satisfaction, (2) some variables were “satisfiers,” when the action (friendliness) lead to satisfaction, but the converse (lack of friendliness) does not necessarily lead to dissatisfaction, (3) some variables were found to be “criticals” which influenced both satisfaction and dissatisfaction, (4) and finally “neutrals” which were found to have no influence on either satisfaction or dissatisfaction (Johnston, 1995).

Based on relevant consumer behavior literature, this study argues that antecedents which lower intention to leave may not necessarily increase intention to stay among employees. This study proposes that there might be (1) antecedents which influences intention to leave but may not have any influence on intention to stay (dissatisfiers), (2) antecedents which influences intention to stay but may not influence intention to leave (satisfiers), (3) antecedents which might influence both intention to leave and intention to stay (criticals), and (4) antecedents which might not influence either intention to leave or intention to stay (neutrals). It is important for hospitality organizations to uncover those determinants which not only lower intention to leave but perhaps more importantly focus on those determinants which encourage and promote employees to stay within an organization.

The investigation into the causes as to why those who work in the hospitality industry voluntarily intend to leave or stay with their organizations has been minimal. Specific to the restaurant industry, key variables that have had a significant impact on managerial turnover based on managers’ self-reported intention to leave have been uncovered (Crandall, Emenheiser, Parnell & Jones, 1996). Crandall et al., (1996) revealed a discriminate function that distinguished leavers from stayers and concluded that two variables, distinctive to the restaurant segment of the industry - ‘perceived threat of physical harm’ and ‘long weekend work hours’, were discriminated successfully between leavers and stayers. Moreover, investigation into the causes as to why hourly workers in the hospitality industry voluntarily intend to leave their jobs has also been minimal while no previous research was uncovered in the hospitality literature on hourly employees’ intent to stay within the industry. Previous research published evaluating the causes of non-supervisory intent to turnover has studied determinants such as the link between the promotional opportunities of hotel employees and their intentions to leave their organization (Deery & Shaw, 1999), as well as turnover culture within hotels (Iverson & Deery, 1997). Hourly level resort employees’ intention to leave has also been evaluated. It was determined that significantly low levels of job satisfaction and career interest influenced the likelihood of workers leaving their organizations (LaLopa, 1997).

Despite the lack of relevant research in the hospitality literature, various antecedents have been found in the general business literature to have a direct relation to employees’ intent to leave their present organizations. Perceived organizational support (POS), perceived supervisor support (PSS), and organizational commitment (OC) have been extensively researched by scholars over the years and have been found to have a significant influence on employees’ intention to leave. While intention to leave has been extensively researched, there have been minimal studies published in the general business literature on intention to stay. This study investigates whether these three independent variables will also have an influence on intention to stay of employees. The fundamental objective of the study is to examine whether the predictors which influence employee intention to leave, will also influence intention to stay of employees. Therefore, the purpose of the study is twofold, (1) to examine the influence of POS, PSS and OC on intention to leave, and (2) to investigate the influence of POS, PSS and OC on intention to stay.

METHODOLOGY

Sample and Data Collection

A self-administered questionnaire was distributed to 828 non-managerial employees from 13 mid-to-upscale restaurants representing four different companies and four upscale hotels in the U.S. Employees were advised that participation was voluntary and that their responses would remain anonymous. Upon completion, participants submitted surveys to the researchers in secure envelopes. Of 828, 425 were initially returned. After a

thorough review of the returned questionnaires, 416 were deemed appropriate and complete and were utilized for analysis in this report, yielding a final 50% usable response rate.

Measures

Perceived Organizational Support

Perceived organizational support (POS) was measured with the 17-item scale developed by Eisenberger and colleagues (1986). Employees were asked to indicate the extent of their agreement on the statements on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*). A sample item is stated as “The company really cares about my well-being.” The reliability for this construct measured by Cronbach’s alpha was .94.

Perceived Supervisor Support.

Perceived supervisor support was assessed with seven items used in Pearce, Sommer, Morris and Frideger (1992). Participants were asked to indicate the extent of their agreement on each item ($\alpha = .89$). A sample question is “My supervisor seems willing to listen to my problems.” Scale anchors ranged from 1 (*strongly disagree*) to 7 (*strongly agree*).

Organizational Commitment

Organizational commitment was measured with six items used by Meyer, Allen and Smith (1993) on a 7-point scale (1 = *strongly agree*, 7 = *strongly disagree*). A sample item is “I would be very happy to spend the rest of my career with this organization.” Coefficient alpha for this measure of organizational commitment was .81.

Intention to Leave

We used one item to measure intention to leave. The question was stated as “I am likely to leave this organization within the next 12 months.” A 7-point scale was used, 1 = strongly disagree and 7 = strongly agree.

Intention to Stay

One item was used to measure intention to stay, “I desire and intend to remain at this company.” It was measured on a 7-point scale.

Demographic Variables

Respondents were also asked to provide information on gender, age, tenure at their current organization, and education. Gender was recorded as 1 being female and 2 being male. Age was recorded in years, and tenure was recorded in months. Education was measured in four categories, 1 = high school degree, 2 = some college, 3 = associate degree, 4 = bachelor degree, and 5 = master degree.

Data Analysis

We employed a structural equation modeling to analyze the effects of POS, PSS, and OC on intention to leave and intention to stay. First, we tested the model fit for the three constructs, POS, PSS, and OC through a confirmatory factor analysis. Then, we examined the significance of coefficients of paths between the predictors and dependent variables. Because a single item was used to assess intention to leave and intention to stay, a reliability level of .85 was assumed to allow for measurement error, and the path coefficient and error variance were fixed accordingly (Donavan, Brown, & Mowen, 2004; Hair, Anderson, Tatham, & Black, 1998).

RESULTS

Measurement Model

Before testing coefficients of the paths, we applied a confirmatory factor analysis to establish unidimensionality and constructs’ reliability and validity. The first CFA showed a poor model fit according to the goodness of fit indexes, $\chi^2 = 3,191.5$, $df = 456$, $p < .001$, GFI = .59, CFI = .72, and RMSEA = .12. Thus, it was apparent that some modification in specification was needed in order to determine a model that better represents the sample data. The modification indexes showed possible presence of factor cross-loadings. Anderson and Gerbing (1988) suggested four methods to improve model fit: (1) relate the indicator to a different factor, (2) delete the indicator from the model; (3) relate the indicator to a multiple factor; or (4) use correlated measurement error. They stated that the first two methods are preferred because they preserve unidimensional measurement, whereas the second two methods do not. Therefore, we chose to delete the indicators showing possible cross-loadings instead relating them to a different factor because we could not find a theoretical support for the approach. This process

resulted in deleting 17 items and improved the model fit, $\chi^2 = 393.6$, $df = 82$, $p < .001$, $GFI = .89$, $CFI = .91$, $RMSEA = .09$. To make sure that deleting those items did not worsen the reliability and validity of the constructs, we conducted composite reliability and validity test for the first measurement model (before deleting the items) and the modified measurement model (after deleting the items). Table 1 shows the results of the composite reliabilities and validity for the two models.

Table 1
Results of Composite Reliability and Validity

Construct	Number of items		Composite reliability		Convergent validity	
	1 st Model	2 nd Model	1 st Model	2 nd Model	1 st Model	2 nd Model
POS	17	8	.93	.92	.46	.58
PSS	7	3	.90	.80	.56	.57
OC	6	2	.82	.83	.45	.71

The composite reliabilities were satisfactory for both models, but the modified measurement model showed improved convergent validities, exceeding the minimum criterion, .50 (Fornell & Larcker, 1981). Discriminant validities were also evaluated for both models. With respect to the standards that Fornell and Larcker (1981) suggested, the amount of variance extracted in each construct compared with the square of the coefficients representing its correlation with the other construct. In the first model, the square of the coefficients of correlation between OS and OC (.50) and OS and SS (.46) were greater than the proportion of variances extracted in OS (.46) and OC (.45) which mean that OS and OC did not have adequate discriminant validity. On the other hand, in the modified measurement model, all model constructs exhibited discriminant validity ($r^2_{os,oc} = .33$, $r^2_{ss,oc} = .26$, $r^2_{os,ss} = .34$). Given the improved model fit indexes, composite reliabilities, and convergent and discriminant validities, we decided to use the modified measurement model to examine the effects of the three constructs on intention to leave and stay.

Structural Model Results

With the modified measurement model we tested the effects of POS, PSS, and OC on intention to leave and stay. The structural model fit was good ($\chi^2 = 393.6$, $df = 82$, $p < .001$, $GFI = .89$, $CFI = .91$, $RMSEA = .09$). Table 2 presents the standardized path coefficients and associated t-values for all relationships in the structural model. The purpose of this study was to examine the effects of POS, PSS, and OC on employees' intention to leave and intention to stay. We hypothesized that as an employee's perceived organizational support increases, his or her intent to leave decreases. The results reported in Table 2 support this effect ($\beta = -.16$, $p < .001$). We also predicted a negative effect of PSS on intention to leave; the results did not support this prediction ($\beta = .26$, $p < .001$). We also anticipated that when employees committed to their organization strongly, they were less likely leave the organization; the results support this hypothesis ($\beta = -.38$, $p < .001$). We hypothesized that as employees' perceived organizational support increases, their intention to stay will also increase; the results shown in Table 2 suggest this hypothesis was supported ($\beta = .36$; $p < .001$). However, the findings showed that PSS and OC did not have significant relationship with intention to stay.

Table 2
Results of Structural Equations Analysis

Path	Path Estimate	t-value			
POS → IL	-.16	-2.26			
PSS → IL	.26	3.55			
OC → IL	-.38	-5.39			
POS → IS	.36	5.15			
PSS → IS	.05	.64			
OC → IS	.00	.01			
Measurement model			Path	t-value	Mean

		estimates		
Perceived Organizational Support				
POS1	The company values my contribution to its well-being.	.77	Fixed	5.47
POS2	The company strongly considers my goals and values.	.79	17.00	4.96
POS3	The company really cares about my well-being.	.83	18.13	4.88
POS4	The company is willing to extend itself in order to help me perform my job to the best of my ability.	.75	15.87	5.11
POS5	The company is willing to help me when I need a special favor.	.62	12.92	5.04
POS6	The company cares about my opinions.	.83	18.04	4.92
POS7	The company takes pride in my accomplishments at work.	.75	15.98	5.06
POS8	The company tries to make my job as interesting as possible.	.74	15.82	4.65
Perceived Supervisor Support				
PSS1	My supervisor seems willing to listen to my problems.	.72	Fixed	5.80
PSS2	My supervisor is friendly.	.82	13.85	5.77
PSS3	My supervisor seems to be rather distant and unapproachable. ^r	.72	12.84	5.48
Organizational Commitment				
OC1	I do not feel like “part of the family” at my company. ^r	.85	Fixed	4.84
OC2	I do not feel a strong sense of “belonging” to my company. ^r	.84	14.60	4.98
IL	I am likely to leave this organization within the next 12 months.	1.00	Fixed	3.29
IS	I desire and intend to remain at this company.	1.00	Fixed	4.68
Structural Model Statistics		Results		
χ^2		393.57		
d.f.		82		
GFI		.89		
CFI		.91		
RMSEA		.09		

^r = reverse coded.

Note: N = 416. Standardized path estimates are shown; IL = intention to leave; IS = intention to stay

DISCUSSION

This study attempts to compare factors affecting intention to leave and intention to stay. As Johnston (1995) argued, we assumed that intention to stay and intention to leave are “two sides of the same coin.” This assumption suggests if we decrease a degree of a factor affecting intention to leave, we could influence employees’ intention to stay. However, the results of this study showed that the assumption is not always true. In this study organizational commitment decreases intention to leave, but it does not have a same effect on intention to stay. Perceived organizational support, on the other hand, was effective to decrease intention to leave and increase intention to stay, but the magnitudes of effects of perceived organizational support (POS) were different. The results indicated that the effect of POS on intention to stay was more than two times stronger than the effect of POS on intention to leave. This finding suggests that organizations should investigate what organizational practices influence employees to develop beliefs that their employers have concern for their contribution and well-being. Human resource management practices can be used successfully by companies to influence employees’ belief about the organizations’ commitment to them. Recent empirical research has established a positive relationship between HRM practices (training, developmental experiences and promotion) and POS suggesting that employees consider HRM practices as one way through which organizations display its commitment to its employees (Wayne, et al., 1997).

The interesting finding in this study was a positive impact of perceived supervisors’ support (PSS) on intention to leave which was inconsistent with the finding in Rhoades, Eisenberger and Armeli’s study (2001). We suspected that PSS might have indirect impact on intention to leave through POS as suggested by Eisenberger et al. (2002). Therefore, we modified the model to test whether PSS decreases intention to leave through POS. The results of the test, however, showed that PSS had a positive effect on POS ($\beta = .62, p < .001$), but POS did not have an impact on intention to leave. Thus, the finding in this study carries a very important point; the impact of PSS on intention to leave is still in question and needs further research.

The modified measurement model improved its model fit and convergent and discriminant validities. This suggests urgency in developing a better measurement for POS, PSS and OC for the hospitality workers. The measurement for POS that we adopted consisted of 17 items; PSS measurement included seven items; and OC was measured with six items. But all three measurements did not have adequate convergent and discriminant validities in the model developed in this study. On the other hand, the modified POS measurement included only eight items; the modified PSS consisted of three questions; and OC included only two items. Moreover, convergent and discriminant validities of all of these modified measurements were improved. This result suggest that these three constructs could be measured with less items while maintaining satisfactory level of reliability and convergent and discriminant validities. The modified measurements should be re-tested to re-confirm their reliability and validity. If future study confirms the modified measurements' reliability and validity, it would benefit researchers in terms of the ease of conducting surveys since respondents are required to answer fewer questions.

In summary this study was the first attempt to compare the effects of POS, PSS and OC on intention to leave and the effects on intention to stay. Perceived organizational support and commitment decreased intention to leave, but perceived supervisor's support actually increased the intention to stay. Only perceived organizational support had positive effects on employees' intention to stay. The results indicate that factors affecting intention to leave and stay are indeed different. Since an organization's employment goal is to retain talented employees, it is important for HRM researchers to investigate other factors influencing employees' intention to stay, rather than focusing on what makes employees leave an organization.

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JOB SATISFACTION OF CASINO HOTEL CHEFS

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ABSTRACT

Job satisfaction of casino hotel chefs have been minimally studies, yet they have significant role in determining successful hotel operations. Job satisfaction of hotel chefs in a top-tier gaming and tourism city was investigated. Using a randomly selected sample of 25 major casinos, a total of 152 surveys were analyzed. Overall, the casino hotel chefs were satisfied with their jobs with a mean score of 3.9 (out of 5). However, multivariate analysis revealed significant differences in job related motivators among casino hotel chefs. These results reinforce the importance to provide hotel chefs with more recognition and autonomy at work.

Key Words: job satisfaction, casino hotel chefs, intrinsic and extrinsic motivations

INTRODUCTION

Chefs are widely recognized as hospitality professionals who maintain the high quality of food production and foodservice. As pointed out by Nebel, Braunlich, and Zhang (1994), “full service, luxurious hotels are often judged by the quality of their F&B operations” (p. 3). While chefs possess advanced culinary expertise and profound food knowledge, they are more than cooks in that they are required to possess planning and management skills, perform both culinary personnel training and supervising responsibilities as well as coordinate food related departments for hotel culinary production (Career as a Chef, 2007).

Rowley and Purcell (2001) research on chefs suggested that they often work in stressful, highly bureaucratic, unsociable, unstable, and unpleasant work environments. Pratten (2003) studied chefs’ retention in British restaurants and found that lack of training, long working hours, low wages, and cramped work conditions were major reasons for turnover. Murray-Gibbons & Gibbons (2007) concluded that the “excessive workload, feeling undervalued, and poor communication channels” also have been found as major stress factors in British and Northern Ireland chefs. This kind of stress, described by one hotel head chef cited in Rowley and Purcell’s (2001) article, as “everything I do is against the clock. You’ve got to enjoy food or the stress will kill you” (p.169). In addition, Pratten’s (2003) data implied that absence of motivation and job satisfaction, and a long tradition of authoritarianism are serious issues existing in the culinary profession.

Research Objectives

This study focuses on the “back of the house leaders” in casino hotels-chefs, and investigates their job satisfaction. The first objective of this research was to develop a basic understanding of factors that contribute to the job satisfaction of casino hotel chefs. The second objective was to explore whether casino hotel chefs’ background characteristics were associated with their overall job satisfactions. The third objective was to explore intrinsic and extrinsic factors of satisfaction and whether these factors are associated with the chefs’ background characteristics.

Chefs who work in foodservice operations in casino hotels in major gaming and tourism cities are uniquely different from chefs who work in free-standing restaurant and hotel settings. The mega-resort type of casino hotel property has highly complex culinary operations and highly-structured kitchens that are organized to respond to the mass production requirement. The intense competition, diverse backgrounds of management teams and casino guests' demands in dining expectations have put hotel casino chefs' working life on the fast track. With this wide continuum of responsibilities, the lives of chefs are often erratic and demanding on a daily basis.

According a recent gaming city visitors' survey, the primary purpose visiting to the gaming city was "vacation/pleasure" and "dining and restaurant" was the most important activity ($M=3.7$) during the trip. In addition, visitors spent an average of \$260.68 for food/drink per trip, a 24% increase compare to 2003 (2006 Visitor Profile Study). The present research is based on the assertion that these "back of the house" chefs have equal responsibilities as front of the house managers to ensure customers' overall satisfaction in room, foodservice, gaming, and entertainment are achieved.

LITERATURE REVIEW

Job satisfaction has been widely studied and found as a significant predictor in organizational commitment and turnover (LaLopa, 1997). When hospitality employees are satisfied with their job, they are more willing to provide exceptional service that exceeds customers' expectations (Dienhart & Gregoire, 1993) and able to positively influence guests' attitude toward the image of the hotel (Spinelli & Canavos, 2000). The unique characteristics of "labor intensity" and "people serving people" in the hospitality industry has directed researchers' attention to investigate the internal dynamics of employees' attitudes toward their job. These studies have been conducted to provide solutions to human resources issues, such as increasing retention, promoting performance, and adding to employees' overall quality of work life (Sarabakhsh, Carson, & Lindgren, 1989).

Frederick Herzberg initially investigated factors associated with employees' job satisfaction and dissatisfaction in 1950s. Herzberg further collaborated with Mausner and Snyderman (1959) to develop a typology of factors proposed to impact employees' job satisfaction and dissatisfaction. The two-factor or motivation-hygiene theory focuses on factors that affect job satisfaction (Herzberg, et. al, 1959). Hygiene factors, are identified as extrinsic factors, related to work conditions and environment while motivators, are related to the self-fulfillment and provide "what is needed for intrinsic motivation" (Kosmoski, 1997). However, intrinsic factors "satisfy people's psychological needs such as activity security, personal interest, responsibility, achievement, advancement, and moral values" (Hance & George, 2003, p.86).

In the hospitality field today, the two-factor theory developed by Hertzberg is recognized as useful and applicable in understanding job satisfaction (Wong, Siu, & Tsang, 1999). While studying the specific factors of job satisfaction, Tony and Cathy (1995) found that "extrinsic factors are much more important than intrinsic factors to motivate employees in the hospitality industry" (Tony & Cathy, 1995, as cited in Lam, Baum, & Pine, 2001, p. 35). A similar finding was reported by Smith, Gregory, and Cannon (1996) who noted that extrinsic factors are more important than intrinsic factors in determining lodging employees' job satisfaction. In contrast, Wong, Siu, and Tsang (1999) concluded that extrinsic factors "do not guarantee actual satisfaction". The difference has raised a concern and suggested that hotel employment status (i.e., seasonal or full-time employees), departments, tenure status, and demographic backgrounds play important roles in influencing what motivate employees or makes them happy (Lee-Ross, 1995; Simon & Enz, 1995; Tas, Spalding & Getty, 1989). The present study expands the current research in the hospitality field by exploring job related motivations and satisfaction of casino hotel chefs' working in a competitive, tier-one gaming and tourism city.

Job Satisfaction in Hospitality Industry

The job satisfaction of the front-of-the house managers is well documented in the hospitality field. Lam, Baum, and Pine (2001) discovered three of their proposed job dimensions, including work environment, job itself, and rewards as having positive influences on participants' overall job satisfaction. Job security in the rewards category was found to be the most influential factor in predicting job satisfaction. While measuring the effects of job factors on hospitality employees' satisfaction, Spinelli and Canavos (2000) found that a satisfied employee is one "who is well-paid, given creative/challenging tasks, involved in decision making, receiving adequate training and benefits, has career advancement opportunity, and has an effective general manager" (p. 32).

Focusing on restaurant employees, Hancer and George (2003) used the Minnesota Satisfaction Questionnaire (MSQ) to investigate employees from 52 restaurants of a regional restaurant chain. Among the 798 participants, about half (50.2%) of the participants reported low levels of satisfaction. Their low satisfaction mean scores were found in compensation, authority, social status, and advancement. The same results were found in Ghiselli, Lalopa, and Bai's study (2001) with the same scale. These researchers concluded that compensation, job security, authority and responsibility, and variety in jobs are important components to food service managers' job satisfaction.

In conclusion, chefs who work in luxury casino hotels have the privilege of leading a group of highly-skilled culinary teams, utilizing the best food ingredients, and presenting exceptional quality food featuring exotic themes to accommodate diverse needs of the most demanding hotel clientele. According to Borchgrevink et al. (1998), working chefs sacrifice much of their lives by spending a significant amount of time away from their families. Apart from their seemingly glamorous working life, chefs "frequently work overtime than average number of people" (Murray-Gibbons & Gibbons, 2007), "were poorly paid" (Pratten, 2003), and the kitchen maybe mix with "physical violence and psychological abuse" (Johns & Menzel, 1999). By further understanding factors contributing to their job satisfaction, hospitality organizations can enhance effectiveness and positive outcomes such as employee performance and satisfaction (Sneed, 1988).

METHODS

Questionnaire Development and Administration

A total of 25 major casino hotels were randomly selected and contacted based on hotel ratios on each district. The sample selection represented various types of foodservice operations and functions within the hotel segments. To facilitate this study, a survey instrument was constructed consisting of two sets of close-ended questions. Before disseminating to the actual survey group, in-depth expert interviews were conducted (5 casino hotel chefs) and a pilot study was initially performed to fine-tune and validate the survey instrument. Appropriate changes were made to the instrument based on the feedback from the expert and pilot test group. The final version was disseminated to 450 randomly selected hotel chefs. Of the 450 surveys sent, a total of 152 surveys were usable, representing an overall return rate of 34%. In terms of subject criteria, only those chefs who had supervisory or managerial responsibilities participated in this study.

Part I of the survey instrument contained 15 items regarding the background information of casino hotel chefs. Part II listed 37 job satisfaction items, using a 5-point Likert-type response scale ranging from: 1= strongly disagree to 5 = strongly agree. Research on job satisfaction has suggested two dimensions: (1) intrinsic (motivators) factors and (2) extrinsic (hygiene) factors (Hertzberg, 1959). The intrinsic motivators measure 4 facets of satisfaction, including work itself, responsibility, achievement and personal growth, and recognition. The extrinsic factors measure 5 facets of satisfaction, including: supervision, interpersonal relationship, work condition, company and administrative policies, and salary.

Statistical Analyses

Five methods of data analysis were performed. First, Cronbach's alpha was computed to assess the internal consistency reliability for the job satisfaction scale. Second, descriptive statistics, including frequency and percentage distribution, were performed to summarize background characteristics of casino hotel chefs. Third, ANOVA was conducted to examine the effects of background characteristics on chefs' overall satisfaction; and fourth, a t-Test was used to examine mean differences between intrinsic and extrinsic satisfaction factors. Finally, multivariate analysis of variance (MANOVA) analysis was employed to detect effects of background characteristics on casino hotel chefs' intrinsic and extrinsic satisfaction factors.

RESULTS

The value of coefficient alpha for overall satisfaction was .88 respectively. Results of reliability tests indicated the measurement used in this study was highly reliable.

Demographic Profile

The total study sample included was 152 hotel chefs (139 males and 13 females) who worked in casino hotels in a major resort city in Nevada. The participants worked in different kitchens, such as fine dining ($n=56$),

casual dining ($n=23$), production kitchens ($n=14$; including 5 in garde manger; 4 in main kitchen production; 5 in bake shop), buffet and 24-hour coffee shop ($n=24$), banquet ($n=19$), and others ($n=12$). One-fourth of the respondents were at the age between 31-35 and 21.9% were between 26-30. The background information was summarized in Table 1.

Table 1
Demographic Profile of Survey Respondents

Characteristic	Frequency	Percentage
Gender		
Male	139	91
Female	13	8.5
Age		
Less than 25	9	5.8
26-30	34	21.9
31-35	38	24.5
36-40	31	20.0
41-45	26	16.8
46 and above	17	11.0
Marital		
Single	66	42.6
Married	20	12.9
Married with Kids	60	38.7
Others	9	5.8
Education		
High school (HS.)	43	27.7
Association (Asso.)	57	36.8
Bachelor (Bach.)	15	9.7
Graduate degree	6	3.9
Certificate/Culinary/both	34	22.0
Position		
Executive Chefs & Sous Chef	4	2.6
Rest. Head/Room Chef	36	23.2
Rest. Sous Chef	35	22.6
Chef de Tournment	26	16.8
Buffet/Banquet/Pastry chefs	33	21.3
Others	9	5.8
Kitchen Type		
Fine Dining	56	36.1
Casual	23	14.8
Production kitchens	14	9.0
Buffet and Coffee shop	24	15.5
Banquet	19	12.3
Others	12	7.7
No. employee supervised		
Under 10	22	14.2
11-20	37	23.9
21-30	37	23.9
31-40	18	11.6
Over 40	37	23.9

Job Background on Casino Hotel Chefs' Overall Satisfaction

Overall, the casino hotel chefs participating in this study were satisfied with their jobs with a mean score of 3.9 (out of 5). The majority (78%) indicated an average level of job satisfaction while 12.25% reported high level of job satisfaction and 9.6 % reported a low level of job satisfaction. Based on their mean scores, the facets of their jobs that they were most satisfied with were intrinsic factors and centered on nature of the job. These included variety, creativity, challenging, interesting, and competitive- striving to the best. Despite these positive job-related appraisals, the chefs were not satisfied with "recognition" on the job (Table 2). Additional sources of dissatisfaction were extrinsic factors, including unrelated chores or duties, paid vacation, salary, ad sick leave days.

Table 2
Highest and Lowest Satisfaction Factors

Satisfaction Factors	Highest satisfied items		Lowest satisfied Items	
	Mean	Ranking	Mean	Ranking
Variety in job (Intrinsic)	4.79	1		
Creativity (Intrinsic)	4.71	2		
Challenging (Intrinsic)	4.68	3		
Interesting (Intrinsic)	4.67	4		
Competitive, striving to be the best (Intrinsic)	4.65	5		
Unrelated duties (Extrinsic)			2.60	1
Paid Vacation (Extrinsic)			2.84	2
Salary (Extrinsic)			2.94	3
Sick leave days (Extrinsic)			2.99	4
Recognition (Intrinsic)			3.03	5

This study revealed significant differences in job satisfaction among chefs based on their kitchen types, education background, and number of employee supervised. First of all, the job satisfaction levels of chefs who worked in casual dining were significantly different from their counterparts in fine dining, production kitchen (including garde marge, bake shop, main kitchen), buffet, and 24-hour coffee shop ($F=2.97, p<.05$). Specifically, chefs working in the production kitchens had the highest job satisfaction mean score ($M=150.35$) while chefs work in casual dining had lowest job satisfaction mean score ($M=137.87$). In addition, different education backgrounds were associated with significantly different level of job satisfaction ($F=2.97, p<.05$). When certifications were controlled, chefs with high school degrees were found to have the highest job satisfaction level ($M=149.08$) while those with bachelor degrees had lowest job satisfaction level ($M=139.25$). Significant differences in chefs' job satisfaction levels were also associated with the number of employees they supervised ($F=3.20, p<.015$). Chefs supervising between 21 to 30 employees were found to have the highest job satisfaction level ($M=149.36$) while the lowest job satisfaction mean scores were found among chefs supervising 31 to 40 employees ($M=138.33$).

Factors Affecting Chefs' Intrinsic and Extrinsic Satisfaction

A t-Test was performed to determine whether there were differences in extrinsic and intrinsic factors of job satisfaction within the sample of chefs. Results indicated that significant difference existed in casino hotel chefs' intrinsic and extrinsic satisfaction levels ($p<.001$). Among the intrinsic factors, casino hotel chefs were most satisfied with their job based on the "work itself" subcategory and least satisfied with their job in terms of "recognition" subcategory. In terms of the extrinsic factors, casino hotel chefs were most satisfied with the "administration and policy" category while the lowest mean score was found in the "salary" category (see Table 3).

Table 3
Job Satisfaction Mean Comparison between Intrinsic and Extrinsic Factors

Satisfaction	Mean	Std	Intrinsic vs. Extrinsic	
			χ	Sig
Intrinsic Factor	4.28	.418	1996.22***	.000
Work itself	4.70	.514		
Responsibility	4.37	.561		
Achievement	4.02	.603		
Recognition	3.63	.636		
Extrinsic Factors	3.69	.426		
Administration & Policy	4.12	.549		
Relations	4.03	.528		
Work condition	3.63	.726		
Supervision	3.47	.649		
Salary	3.03	.666		

Note. *** $P<.000$

Results of the MANOVA analysis revealed that there were no mean differences in the intrinsic and extrinsic job satisfaction subcategories based on chefs' age, position, marital status, and work hours. However, significant differences were found among chefs employed in various kitchen types. The Box's Test indicated that the groups had equal variances, $F(90,14639.86)=1.105$, $p=.233$. Examination of post hoc results indicated that casual dining chefs significantly differ from their counterparts in fine dining and production kitchens in work itself ($F(2,145)=6.38$, $p<.005$, partial $\eta^2=.081$), work condition ($F(2,145)=4.05$, $p<.05$, partial $\eta^2=.053$), and salary ($F(2,145)=6.03$, $p<.005$, partial $\eta^2=.077$).

DISCUSSION

By evaluating 152 chefs from 25 hotels in a highly competitive gaming and tourism city in US., this study identified overall and specific job satisfaction. Results indicated that casino hotel chefs reported moderate to high levels of overall job satisfaction, and an intrinsic factor, the nature of work, was a major motivator or contributors. This finding supports Silva's (2006) conclusion that the pleasure of working in a challenging and competitive environment while being able to use their creativity and performing variety of tasks enables the chefs to "enjoy their job, feels it is meaningful, and has a sense of pride about it" (p.325). This result also is in agreement with previous findings of Kosmoski (1997) and Hancer and George (2003), who found that intrinsic factors were the major sources of employee satisfaction and "job itself was an influential factor in predicting overall job satisfaction" (Lam, Baum, & Pine, 2001, p. 40).

However, on the other hand, chefs reported low satisfaction levels with respect to unrelated duties, paid vacation, salary, and sick leave days (extrinsic factors). The relationship between job satisfaction and these factors has been reported by a number of hospitality researchers. Unsuitable working hours and poor financial compensation have been cited as key reasons for changing companies, changing careers, or leaving the hospitality industry (Kosmoski, 1997; O'Leary & Deegan, 2005). Recognition was another factor (intrinsic) that the chefs reported low levels of satisfaction. This finding is consistent with Borchgrevink, Nelson, and Ruf's study (1998). These researchers concluded that "working hard without recognition" was a major contributor in chefs' negative experiences. Thus, even though kitchens are "notorious for their discipline and have to be assertive and aggressive environments or nothing happens" (Pratten, 2003, p. 239), managers can "increase communication in the kitchen" (Murray-Gibbons & Gibbons, 2007, p.39) and "take employee desires into account to create an environment where high effort, properly channeled, will give employees some measure of satisfaction" (Simon & Enz, 1995, p. 27).

This study found that overall job satisfaction levels differed among chefs working in various kitchen types, education background, and number of employee supervised. Highest satisfaction were found among chefs who worked in production kitchen, had high school diplomas, and supervised between 21 to 30 employees. While lowest levels of satisfaction were found among chefs who worked in casual dining, had bachelor degrees, and supervised between 30-40 employees. Chefs working in the casual dining kitchen were found low satisfaction in work condition and salary. The implications of this finding have been addressed by scholars in the field. According to Simon and Enz (1995), poor work conditions may "serve as a strong force against hospitality workers' motivation" (p.23) and predict low satisfaction (Lam, Baum, & Pine, 2001). In terms of education background, Nebel, Braunlich and Zhang (1994) noted that regardless the level of education and the degree, it probably takes the same years to become a food and beverage top managers. This might reflect why the low satisfactions were found among those who had bachelor degree with certification in culinary training. This career requires "time on the floor" and "solid working knowledge of most food and beverage areas (Nebel, et al., 1994). In terms of employee supervised, the mass production has increased chefs' responsibility for many individuals who may not obtain equal support from their supervisors. Management may provide chefs with more recognition and autonomy at work, as well as developing specialized incentive programs to enhance the satisfaction levels of casino hotel chefs.

The limitation of this study is its generalization because the results only reflect the job satisfaction of casino hotel chefs in a top-tier one gaming and tourism city. This study could be expanded by securing a diverse sample containing chefs from different settings in gaming cities nationwide.

CONCLUSIONS

Hotel chefs participating in this study generally enjoyed their jobs, yet the results of this research suggested that some satisfaction incentives may enhance their overall job satisfaction. For example, while both monetary and psychological rewards are both important, chefs may need to be provided with more recognition, status as well as

certain degrees of autonomy to make important decisions (Hancer & George, 2003). In addition, as proposed by Gill et al. (2006), casino top management should always encourage upward communication and be open to new ideas coming from the culinary management team, thus enhancing chef motivation and the feeling of being an important member of the organization. Although gaming is still the pivotal money maker for casino operations, food and beverage operations play an important role for the entire hotel and casino operations. Casino top management needs to credit the efforts and hard work of the culinary management team and truly cultivate open and trustful atmosphere based on respect, and involve chefs in major decision making process by listening to their voices and reflecting their thoughts in major decision making process. Effective communication with casino top management will result in chefs feeling that they are valued as a part of the key players of the entire hotel casino operations.

Hancer and George (2003) indicated that providing compensation (salary, rewards, and fringe benefits), employee rewards and incentive programs may help to increase the level of satisfaction. As majority of chefs were found low satisfied with their salary and compensation, incentives and awards are positive strokes and team reinforcements (Cullen et al., 2001). In addition, since the culinary profession is a challenging and highly stressful occupation in the hospitality industry, casino top management needs to be aware of chefs' needs and what motivates them by providing needed and progressive culinary managerial experiences. Examples such as: training with job rotation, and providing variety of tasks with responsibility and accountability along with a certain degree of autonomy, flexibility, and total support as a continuous process of their learning to be in sync with chefs' career progression. Since food quality and volume of productivity are essential to the success of the hotel casino foodservice operations, the creation of the motivational culture in the casino kitchens is the key to the hotel casino's culinary success.

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THE EFFECT OF PSYCHOLOGICAL CONTRACT FULFILLMENT ON MANAGER TURNOVER INTENTIONS AND ITS ROLE AS A MEDIATOR IN A CASUAL, LIMITED-SERVICE RESTAURANT ENVIRONMENT

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ABSTRACT

Job satisfaction is the most consistent predictor of turnover intention; however, its correlation with turnover intention in most studies is modest. Leader-Member Exchange (LMX) has not been proven to be a reliable predictor of turnover intention. Meanwhile, the psychological contract has emerged as a useful framework for understanding the employee/employer relationship. In the present research, which utilizes a sample of managers in a casual, limited-service restaurant environment, a structural equation model is developed in which psychological contract fulfillment serves a mediating role between LMX and turnover intention. Psychological contract fulfillment is also found to be a statistically significant predictor of turnover intention.

Key Words: psychological contract, Leader-Member Exchange (LMX), turnover intentions, restaurants

INTRODUCTION

The challenge of recruiting and retaining workers was reported as the number one business challenge by twenty percent (20%) of quick-service restaurant operators in 2004 (National Restaurant Association, 2005). “Turnover remains one of the most troubling issues for hospitality businesses” (Ghisell, La Lopa, & Bai, 2001). Not only is it a business challenge relative to hourly associates, turnover of management personnel is also an acute problem with various studies reporting management turnover rates that range from 33% to as high as 100% annually (Ghisell, La Lopa, & Bai, 2001). The cost of employee turnover in the hospitality industry can run into thousands of dollars per employee lost (Hinkin & Tracy, 2000).

Theoretical frameworks utilized to identify the antecedents to voluntary employee turnover are extensions of a variety of models that were developed in the 1970’s and 1980’s that attribute turnover to affective decisions related to job satisfaction (e.g. Steers & Mowday, 1981; Muchinsky & Morrow, 1980; Mobley, 1977). “The relationship between job satisfaction and turnover is one of the most thoroughly investigated topics in the turnover literature” (Hwang & Kuo, 2006). In a meta-analysis focused on actual employee turnover, overall job satisfaction is identified as the best predictor of voluntary turnover that is related to the actual job or work environment itself (Griffeth, Hom, & Gaertner, 2000). Yet the correlation between job satisfaction and voluntary employee turnover has been modest with correlations ranging between -0.18 and -0.28 in several meta-analytic reviews (Trevor, 2001). Consequently, the identification of additional antecedents to turnover is necessary in order to assist employers in developing strategies that may effectively reduce voluntary employee turnover. Although job search has been identified as another reliable predictor of employee turnover (Steel, 2002; Griffeth *et al*, 2000), this factor is not substantively impacted by actions of the employer. The purpose of this study is to evaluate the role of Leader-Member Exchange (LMX) and psychological contract fulfillment, two constructs that may be influenced by the employer, on employee turnover intentions in a food service environment.

LITERATURE REVIEW

Leader-Member Exchange (LMX), first conceptualized as the vertical dyad linkage model of leadership, was initially proposed as an alternative to an average leadership style (Graen & Cashman, 1973; Liden & Graen, 1980). Many leadership theories, including trait, behavioral, and contingency theories, propose that subordinate perceptions of the leader’s style of leadership by organizational members are consistent or modified based only upon the specific circumstances; LMX focuses on the unique relationships that may develop between supervisors and individual subordinates within an organization. LMX is defined as the quality of the dyadic, work relationship between an organizational member and his or her supervisor in terms of the interrelated dimensions of respect, trust, and mutual obligation (Graen & Uhl-Bien, 1995).

LMX has been identified to have a positive relationship with job satisfaction (Stringer, 2006; Gerstner & Day, 1997; Graen, Novak, & Sommerkamp, 1982) while its relationship to turnover and turnover intent has been

equivocal (Gerstner & Day, 1997; Wilhelm, Herd, & Steiner, 1993; Vecchio, 1985). Findings have suggested that the relationship between LMX and turnover is mediated through other affective cognitions including organizational commitment and job satisfaction. Some researchers have suggested that a negative, albeit weak, linear relationship exists (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995) while more recent empirical inquiries suggest that a curvilinear relationship may exist between the constructs (Morrow, Suzuki, Crum, Reuben, & Pautsch, 2005; Harris, Kacmar, & Witt, 2005). Previous research indicates that the impact of LMX on turnover intentions requires additional inquiry and clarification. The present research aims to provide some clarification relative to the relationship between LMX and turnover intention, hypothesizing that the relationship may be mediated by psychological contract fulfillment by the employer.

The psychological contract has supplanted collective frameworks of the employment relationship in the organizational behavior literature as organizational research, concerning the employment relationship, has shifted from a collective to an individual focus over the past two decades (Guest, 2004). A psychological contract is defined as “an individual’s belief regarding the terms and conditions of a reciprocal exchange agreement between that focal person and another party” (Robinson & Rousseau, 1995). Its theoretical foundation is rooted in social exchange theory (Blau, 1964), which stresses reciprocity. A psychological contract differs from expectations in the respect that it involves mutual obligations or a reciprocal exchange of perceived promises. Two attributes distinguish a psychological contract from an expectation; a psychological contract is both promissory and reciprocal (Rousseau, 1990).

Scholars have identified six features of the psychological contract (Rousseau, 2004). First, participation is voluntary. In addition, an individual’s contract is based upon his or her understanding of the agreement, which may differ from reciprocal party’s understanding, although both parties believe that a mutual agreement has been established and that the other party shares their own understanding of the terms of the agreement. All the details of the contract are not negotiated up front, which requires that many issues will need to be resolved over time. Employees receive information from multiple sources, which forms the basis of the psychological contract, including, but not limited to, senior management, human resource representatives, and the employee’s immediate supervisor. Failure of one party to fulfill their commitments may generate a strong affective, negative reaction; when this occurs, the violating party will attempt to manage the loss if the reciprocal relationship is valued. Finally, a psychological contract serves as a mental model, which guides the behavior of both the employer and the employee. It establishes a stable and efficient relationship that provides both parties with specific expectations regarding the future direction of their ongoing exchange.

There are three characteristics of a psychological contract that may pose a particular concern within the context of this research. First, a psychological contract is subjective in nature and, because it involves an implicit versus an explicit agreement, it is not necessary for both parties to agree to the terms of the contract for the contract to exist. As a result, it is possible for either party to breach the contract without believing that they have actually violated the contract. In addition, a psychological contract evolves over time; the terms of the agreement are revised throughout the employee’s tenure. Finally, the obligations of the employer, as well as the expectations of the employee, are based upon inputs from multiple sources of information. Therefore, a violation of the contract may occur when one representative of the firm fails to fulfill an obligation of which they may not even be aware. When violations occur, the degree to which the employee feels that the psychological contract is violated is dependent upon the relative value of the perceived obligation violated from the viewpoint of the employee. The present research explores the relationship between a single leader and psychological contract fulfillment by the firm as a collective whole.

This is possible since, in the present research, it is assumed that a leader that maintains a high quality exchange relationship with an organizational member works diligently to understand the concerns of the member. Such a leader is also likely to maintain an awareness of the subordinate’s needs over time. In addition, it is assumed that an effective leader ensures that an ongoing dialogue is established in order to negotiate reciprocal obligations that are mutually beneficial and to understand the relative of importance of these commitments from employee’s perspective. This may lead to increased respect and trust between the member and the leader while ensuring that the leader is aware of obligations made to the member by other representatives of the organization. In the present research, it is proposed that the leader becomes the gatekeeper for psychological contract fulfillment by the firm. When a high quality relationship exists, the employee is more likely to feel as though the contract is being fulfilled.

Conversely, when a poor LMX relationship exists, an organizational member is less likely to feel as though the contract is being fulfilled by the organization.

The psychological contract has typically been studied from the employee's perspective (Sturges *et al*, 2005; Guest, 2004; Robinson & Rousseau, 1995) in terms of psychological contract breach or fulfillment and its subsequent impact on employee attitudes or behaviors (e.g. absenteeism, organizational commitment, organizational citizenship behavior, etc.). Research has shown that employees are more likely to fulfill their obligations to the employer when they perceive that the employer has fulfilled their obligations to them (Coyle-Shapiro, 2002). In addition, psychological contract violation may be commonplace (Robinson & Rousseau, 1994). Consequently, some other factor such as LMX, as proposed in the present research, may impact the affective response of the employee to the breach.

Psychological contract fulfillment is related to a number of employee attitudes and behaviors including absenteeism, job performance, job satisfaction, organizational citizenship behavior, organizational commitment, organizational trust, and voluntary employee turnover intention (Deery, Iverson, Walsh, 2006; Sturges, Conway, Guest, & Liefoghe, 2005; Hui, Lee, & Rousseau, 2004; Carbery, Faravan, O'Brien, & McDonnell, 2003; Johnson & O'Leary-Kelly, 2003). A review of the literature reveals that psychological contract violation has a direct, negative relationship with job satisfaction and a positive relationship with job dissatisfaction and turnover intention (Gakovic & Tetrick, 2003; Deery, Iverson, & Walsh, 2003; Cavanaugh & Noe, 1999; Robinson & Rousseau, 1994). Utilizing a sample of professional employees, Suazo, Turnley, & Mai-Dalton (2005) found that psychological contract breach is positively related to turnover intention and negatively related to professional commitment and an employee's in-role and extra-role work performance. In addition, Restubog, Bordia, Krebs, & Tang (2005) suggest that the Leader-Member Exchange (LMX) relationship mediates the relationship between psychological contract breach and employee performance.

Leader-Member Exchange (LMX) is defined as the quality of the dyadic relationship between an organizational member and his/her supervisor in terms of the interrelated dimensions of respect, trust, and mutual obligation (Graen & Uhl-Bien, 1995). Since the leader represents the firm from the employee's perspective, the quality of this exchange relationship may determine, in large part, the quality of the relationship between an employee and his/her employer. By definition, the quality of the LMX relationship is impacted by the degree to which the leader fulfills his/her obligations to the employee. It may therefore be reasonable to anticipate that the quality of the LMX relationship may directly impact the employee's perception that the firm has fulfilled the terms of the psychological contract. This proposition is outlined in hypothesis one (H₁).

H₁: The quality of the Leader-Member Exchange relationship (LMX), as perceived by the employee, is directly related to the employee's perception of psychological contract fulfillment by the employer (PCFfirm).

As previously identified in the literature (e.g. Suazo, Turnley, & Mai-Dalton; 2005), psychological contract fulfillment by the employer is anticipated to be negatively related to turnover intention as outlined in hypothesis two (H₂):

H₂: Psychological contract fulfillment by the employer (PCFfirm), as perceived by the employee, will have an inverse relationship with turnover intention (TrnIntnt).

Consistent with the findings of Coyle-Shapiro (2002), the degree to which the employer fulfills perceived obligations defined by the psychological contract will be directly related to the employee's likelihood to fulfill his/her commitments to the employer. Consequently, the following hypothesis (H₃) is proposed:

H₃: Psychological contract fulfillment by the employer (PCFfirm), as perceived by the employee, will be directly related to psychological contract fulfillment by the employee (PCFemp).

It may also be reasonable to suggest that an employee may be more likely to harbor turnover intentions if he/she perceives that he/she has failed to adequately fulfill his/her obligations to the firm. This is the rationale behind hypothesis four (H₄).

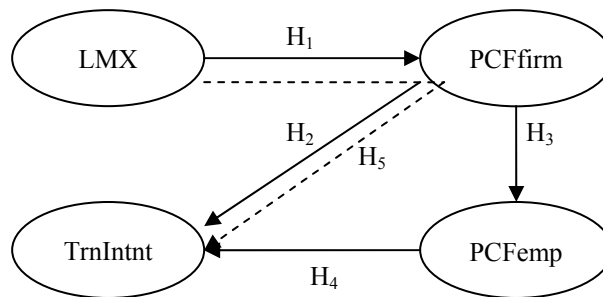
H₄: A direct relationship will exist between psychological contract fulfillment by the employee (PSFemp), as perceived by the employee, and turnover intention (TrnIntnt).

Finally, the quality of the Leader-Member Exchange (LMX) relationship, as perceived by the employee, is expected to have an indirect relationship on turnover intention that is mediated by the degree to which the employee perceives that the employer has fulfilled the psychological contract. This final proposition is outlined in hypothesis five (H₅).

H₅: An indirect relationship exists between the quality of the Leader-Member Exchange relationship (LMX), as perceived by the employee, and turnover intention (TrnIntnt) that is mediated by the degree to which the employee perceives that the employer has fulfilled the psychological contract (PCFfirm).

These hypotheses are illustrated in figure one (1).

Figure 1
Illustration of proposed relationships



METHODOLOGY

Three-hundred-twenty-eight (328) managers, from four (4) different organizations that operate franchised casual, limited-service restaurants in different geographic regions of the United States, completed an online survey. The survey utilized the LMX-7, developed by Graen, Novak, and Sommerkamp (1982), to measure the quality of the Leader-Member Exchange relationship. Psychological contract fulfillment is measured from the employee's perspective utilizing four (4) items from the Psychological Contract Inventory (PCI), two (2) to measure the degree of the firm's fulfillment of the contract and two (2) to measure the degree of employee's fulfillment (Rousseau, 1998). Turnover intent is measured utilizing a four (4) item scale derived from Mitchel (1981). All items were measured on five-point Likert-type scale.

To reduce response bias, age and other demographic information was collected utilizing categorical versus continuous variables. Forty-three percent (43.3%) of the respondents are female and fifty-seven percent (56.7%) are male with the great majority (72.3%) of the participants between the ages of twenty-five and forty-four years-of-age (25 – 44). Forty-two (42.4%) are between the ages of twenty-five and thirty-four (25 – 34), thirty percent (29.9%) are between thirty-five and forty-four (35 – 44), and less than three percent (2.7%) are fifty-five years of age or older (55+). Fourteen percent (13.7%) of the respondents are high school graduates with no further education, over forty-four percent (44.2%) have completed at least some post-secondary coursework, and more than one-third (34.6%) are college graduates with three percent (3.3%) of the respondents holding graduate degrees. Forty-four (43.6%) of the respondents have been employed with the firm for one to three (1 – 3) years, while twenty-eight percent (28.4%) have been with their current employer for less than one year; seventeen (17.0%) percent have been employed with the firm for three to five (3 – 5) years and the remaining eleven percent (10.9%) have more than five (5) years tenure with their current employer. Nearly sixty-percent (59.2%) of the respondents have over ten (10+) years industry experience with twenty-seven (27.2%) having five to ten (5 – 10) years of industry experience; this means that at least seventy-five percent (75.5%) have experience with other employers in the same industry.

Based upon these statistics, the typical respondent is between twenty-five and thirty-four (25 – 34) years-of-age, has attended some college classes, has worked for their current employer for one to three (1 – 3) years and in the restaurant industry for over ten (10) years.

Statistical Package for Social Sciences (SPSS), version thirteen (13.0), was utilized to generate a covariance matrix for the survey items. LISREL, version 8.8, was then utilized to construct a latent variable structural equation model based upon the hypothesized relationships, as illustrated in figure one (1), utilizing the previously constructed covariance matrix for the manifest variables. A path diagram was created, the structural equations were tested for statistical significance, and a correlation matrix was estimated based upon the model. Cronbach's alpha was calculated for each construct to confirm the reliability of the manifest variables that were utilized to estimate the latent variables.

RESULTS

Table one (1) provides the estimated path coefficients, the standard error of the estimates, and the t-value for the direct and indirect effects on each dependent variable. Table two (2) provides the squared multiple correlations (R^2) for direct and indirect effects and the residuals for each dependent latent variable. Table three (3) provides the correlation matrix as estimated by the model with Cronbach's alpha provided on the diagonal. Twenty-eight (28) parameters were estimated by the model, which has thirty-eight (38) degrees of freedom. The root mean square error of approximation is forty-one-thousandths (RMSEA = 0.041), which indicates good fit of the model to the data (Browne and Cudeck, 1993). Four (4) of the LMX-7 items were included in the model due to the strong reliabilities of the items included, coupled with the redundant nature of some of the measures. One (1) of the turnover intention items was omitted from the model due to its low reliability relative to the three additional (3) measures that were included. This provides a more stable solution and does not impact the reliability of the instruments. The Cronbach's alpha values for each construct, based upon the items included in the model, can be found on the diagonal in the correlation matrix (table 3).

Table 1
Estimates of path coefficients for direct and indirect effects

<i>Cause or effect variable</i>	<i>Dependent variable</i>	<i>Path coefficient</i>	<i>Standard error</i>	<i>t-value</i>
Direct effects:				
LMX	PCFfirm	0.77*	0.07	11.18
PCFfirm	PCFemp	0.35*	0.08	4.50
PCFfirm	TrnIntnt	-0.68*	0.06	-11.32
PCFemp	TrnIntnt	-0.01	0.05	-0.27
Indirect effects mediated by PCFfirm:				
LMX	PCFemp	0.27*	0.06	4.23
LMX	TrnIntnt	-0.53*	0.06	-8.70

* $p < 0.01$

Table 2
Squared multiple correlations and residuals for latent variables

<i>Cause or effect variable(s)</i>	<i>Dependent variable</i>	<i>Residuals</i>	<i>R²</i>
Direct effects:			
LMX	PCFfirm	0.52	0.48
PCFfirm	PCFemp	0.88	0.12
PCFfirm	TrnIntnt	0.38	0.55
Indirect effects:			
LMX mediated by PCFfirm	PCFemp		0.06
LMX mediated by PCFfirm	TrnIntnt		0.26

All estimates of path coefficients in the model are statistically significant with the exception of the direct effect of psychological contract fulfillment by the employee (PCFemp) on turnover intention (TrnIntnt) ($\beta = -0.02$, t

= -0.27). Support is found for hypothesis one (H_1); the path coefficient from leader-member exchange (LMX) to psychological contract fulfillment by the employer (PCFfirm) is statistically significant ($\gamma = 0.77$, $t = 11.18$). Hypothesis two (H_2) is also supported due to the statistically significant path coefficient between psychological contract fulfillment by the firm (PCFfirm) and turnover intention (TrnIntnt) ($\beta = -0.68$, $t = -11.32$). The statistically significant path coefficient between psychological contract fulfillment by the employer (PCFfirm) and psychological contract fulfillment by the employee (PCFemp) ($\beta = 0.35$, $t = 4.50$) provides support for hypothesis three (H_3). Hypothesis four (H_4) is not supported since the path coefficient between psychological contract by the employee (PCFemp) and turnover intention (TrnIntnt) is not statistically significant ($\beta = -0.01$, $t = -0.27$). Evidence suggests ($\gamma = -0.53$, $t = -8.70$) that the quality of the leader-member exchange relationship (LMX) has an indirect inverse effect on turnover intention (TrnIntnt), which is mediated by psychological contract fulfillment by the employer (PCFfirm) in support of hypothesis five (H_5). The quality of the leader-member exchange relationship (LMX) also has an effect on psychological contract fulfillment by the employee (PSFemp), which is mediated by psychological contract fulfillment by the employer (PSFfirm) ($\gamma = 0.27$, $t = 4.23$), although the significance of this relationship was not anticipated.

Table 3
Correlations estimated by the model
(Cronbach's alpha on the diagonal)

	1	2	3	4
1. PCF firm	(0.91)			
2. PCF employee	0.35	(0.78)		
3. Turnover intent	-0.74	-0.27	(0.87)	
4. Leader-member exchange	0.69	0.24	-0.51	(0.87)

In a structural equation model, the squared multiple correlations (R^2) provide a measure of the strength of the linear relationships between the variables. Consequently, the strongest linear relationship in the model is the direct effect of psychological contract fulfillment by the firm (PCFfirm) on turnover intention with a squared correlation of fifty-five-hundredths ($R^2 = 0.55$). The linear relationship between LMX and psychological contract fulfillment by the firm (PCFfirm) is also significant generating a squared correlation of forty-eight-hundredths ($R^2 = 0.48$).

DISCUSSION

Researchers have struggled to explain a substantial portion of the variance in turnover intention due to the complexity of the decision to change jobs. A number of factors impact the decision, many of which are not related to the job itself; these may include family-life circumstances, the strength of the job market, social status of the job, etc. Job satisfaction has been identified as the strongest job related predictor of turnover intention (Griffeth, Hom, & Gaertner, 2000); however, the correlation between job satisfaction and voluntary employee turnover has been modest with correlations ranging between -0.18 and -0.28 in several meta-analytic reviews (Trevor, 2001). Consequently, the correlation of -0.74 between psychological contract fulfillment by the firm and turnover intention, as estimated by the structural equation model in the present research, is quite strong.

In addition to identifying an additional employer impacted antecedent of turnover, the goal of this research is also to help clarify the relationship between Leader-Member Exchange (LMX) and turnover intention utilizing a sample of restaurant managers. Attempts to relate the quality of the LMX relationship directly to turnover intention have produced equivocal results. Previous research has suggested that the impact of LMX on turnover intention may be mediated by other variables. The present research suggests that it may be mediated by psychological contract fulfillment by the firm as perceived by the employee.

Although the theoretical contributions of the present research are important, perhaps the practical applications are even more meaningful. In today's competitive, knowledge-driven business environment, businesses compete to attract and retain the best and brightest employees. In most labor markets, a scarcity of talented employees exists, particularly in the area of restaurant management. Consequently, restaurant firms must compete aggressively to attract the most qualified candidates. In order to attract the most talented individuals, many restaurant firms employ recruiters and/or executive search firms to identify management candidates. Since these

recruiters are motivated to make the firm appear as attractive as possible to the potential manager, they may establish psychological contracts that are difficult for the employer to completely fulfill. The current research suggests that employers should work diligently during the recruiting and hiring process to establish realistic expectations and a psychological contract that the employer is confident that they can fulfill even at the risk of losing a recruit. Otherwise, they are likely to invest training and other employment costs in a manager that ultimately leaves the firm if manager perceives that the firm has failed to fulfill the psychological contract that was established during the recruiting process. In addition, the findings indicate that employers that are able to establish high quality LMX relationships between organizational leaders and members may be more likely to fulfill the psychological contracts from the employees' perspective. This, in turn, will lead to employees that are more likely to fulfill their commitments to the firm and are less likely to leave the firm for alternative employment opportunities.

LIMITATIONS AND FUTURE RESEARCH

This research was conducted within the context of a franchised casual, limited-service restaurant with locations throughout the United States utilizing management personnel. This research needs to be replicated in other settings and with other employee populations to verify its generalizability across demographic groups. In addition, the relationships need to be evaluated in other contexts. Future research should also be conducted to evaluate the inclusion of additional variables, such as job satisfaction, in the model to work in tandem with psychological contract fulfillment and Leader-Member Exchange (LMX) to see if larger portions of the variance in turnover intention might be explained.

Finally, psychological contracts take on a variety of forms in an employment context based upon two-dimensions: time frame and performance requirements. The temporal dimension operates along a continuum that runs from short-term to long-term based upon the relationship's promised duration. Performance requirements are related to the connection between the rewards the job provides and the performance demands of the job, ranging from a low level of specificity to highly specific. Variations in psychological contracts along these two dimensions produce four distinct forms: transactional, relational, balanced, and transitional (Rousseau, 1990). It would be useful to evaluate the form of the psychological contract to determine if this factor impacts the role of psychological contract fulfillment in the affective cognitions of employees.

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**FOOD, DRINKS, MUSIC AND A MOVIE. NON-LINEAR DYNAMIC MODELING IN THE CONTEXT OF
INTERNATIONAL MARKETING OF SERVICES**

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ABSTRACT

The present study uses non-linear dynamic modeling in the context of international diffusion of innovation. Building on the Bass (1969) model and its recent dynamic modifications, a quasi-experiment using global U.S. companies is undertaken. After fitting the time-series to a logistic curve, an analysis of the residuals is conducted in order to uncover the relationship between the different companies, and test the hypothesis that global companies “pull” each others’ sales. A multivariate transfer model is proposed, and shows that, in our quasi-experiment, McDonald’s sales can be explained as a function of Coca Cola, Disney and the American Recording Industry worldwide sales. A one-step ahead forecast of McDonald’s worldwide sales using the model shows a significant improvement over competing models.

Key Words: dynamic modeling, international service diffusion.

INTRODUCTION

Non-linear dynamic models (NLDM) in the marketing context are often used to explain change over time of a particular variable such as adoption of a new product by the market or change in attitude toward a particular brand (Papatla & Krishnamurthi, 1992; Paap & Franses, 2000). NLDM provide a way to deal with two main objectives: extracting some meaningful interpretable parameters and dealing with collinearity and heteroskedasticity (Boswijk, Fok & Franses, 2006).

As the market becomes global companies attempt to spread their risks by finding growth in other countries. Launching a service or product in a new country presents several challenges, one of them being the cultural acceptance level of the product, service, or brand in the new country. Traditionally, communication strategies and local adaptations are the way to mitigate or lower the risk associated with international expansion. However, diffusion of low-adapted product or service (i.e., American made movies, beverages, music or American food preparation such as fast-food) in foreign cultures is not always explained by communication efforts. For instance McDonald’s is the number one restaurant chain in France with more than 1,000 units. This cannot be only explained by adaptation or communication efforts, and therefore exogenous factors, such as the historical presence of product or service from the same country of origin (i.e., the US) might explain why a new product or service diffuses “naturally” in foreign soil.

Our purpose in this paper is to explore the possibilities for modeling change over time of marketing events that exhibit non-linear patterns and a dynamic behavior probability. We focus on the diffusion of new product phenomenon and work from the example of a multivariate product growth in an international setting.

LITERATURE REVIEW

In order to keep the paper as relevant as possible we are going to take an example from the marketing literature pertaining to the diffusion of innovation research stream.

The theory of adoption and diffusion of a particular innovation by a social system has been very well covered by scholars, such as Gatignon and Robertson (1985), and summarized by Rogers (2003). Rogers categorized adopters of new products (innovations) as following a Gaussian curve pattern where innovators adopt the new product first, then early adopters follow, and so on until the market is saturated when all potential adopters have purchased the new product (Mahajan & Muller, 1979). The bell shape curve allows for theoretical explanation of consumer behavior and social networking effects (i.e., social contagion effects) giving birth to the modeling of the diffusion curves (Bass, 1969).

Although the probability of first-time purchase is an accepted unit of study when one wants to build a mathematical model to forecast future adoption (Mahajan, Muller & Bass 1990), adoption is defined as a behavior

that goes beyond the first time purchase and that involves repeat purchases (Rogers, 2003). Hence creating a dynamic effect where sales of a particular year include new adopters, as well as repeat purchasers.

The diffusion literature is dominated by the adaptation of the contagion phenomenon explained in the form of an S-shape curve. In that context the Bass model (1969) is the most recognized, and the most parsimonious of the models used by diffusion researchers (Meade & Islam, 2006).

Bass (1969) builds on Rogers' theory of adopter categorization (innovators, early adopters, early majority, late majority, and laggards respectively distributed around the mean of a bell curve) and has the unique feature of requiring the estimation of only three parameters. The Bass model has been used extensively in the marketing literature for the study of consumer durable goods, services, agricultural, industrial, educational or technological innovations (Mahajan, Muller & Bass, 1990; Nevers, 1972).

Several authors have built on the Bass model (Mahajan & Peterson, 1978; Mahajan, Muller & Bass, 1990) and have looked at the impact of price on the diffusion curve; the effect of country or culture on diffusion, or the possibility of successive generations of innovations within the same category of products. Despite some weaknesses the model's variables have explanatory power and seem to hold across studies.

Dealing with repeat purchase in the Bass model

Among the weaknesses in the original model is the fact that repeat purchases are not taken into effect and therefore affect the parameter estimates (Boswijk & Franses, 2002).

Boswijk and Franses (2002) deal with the collinearity in their revised version of the Bass model by adding a dynamic effect:

$$X_t = \underbrace{p(m - N_{t-1})}_{\text{Innovators' effect}} + \underbrace{(q/m)N_{t-1}(m - N_{t-1})}_{\text{Imitators' effect}} + \underbrace{bX_{t-1}}_{\text{Dynamic effect}} + \varepsilon_{ti} \quad (1)$$

Where p, q, m are respectively the probability of innovators' adoption, the probability of imitators' adoption, and the total market potential. X_t is the adoption at time t , N_t is the cumulative adoption at time t and ε_{ti} is assumed to be an independent and identically distributed (i.i.d.) error term with mean zero (Boswijk & Franses, 2002; Franses, 2003); b is the autoregressive dynamic parameter that can be interpreted as the repeat purchase coefficient.

Boswijk and Franses (2002) introduce a modeling of the error term in order to model potential volatility. In their study of ATMs in the Netherlands they use an ARCH model and demonstrate that their model is superior to the Bass model with and without the error heteroskedasticity.

Yet, unless the parameters of the Boswijk -Franses (BF) model are allowed to vary randomly it is difficult to draw causal conclusion on the diffusion phenomenon (van den Bulte, 2000). Multivariate non-linear model are a good way to deal with a research question pertaining to causality as long as the explanatory variable, often strongly correlated to time, and to the independent variable, can be model in such a way that multi-collinearity is controlled for (Boswijk, Fok & Franses, 2006). The authors suggest a multivariate non-linear model and conclude that non-linear general least square estimation yields better results than the usual maximum likelihood method and provide the following system of non-linear equations based on the original Bass model:

$$\text{where } q_{12} \text{ and } \begin{pmatrix} n_1(t) \\ n_2(t) \end{pmatrix} = \begin{pmatrix} 1 - N_1(t) & 0 \\ 0 & 1 - N_2(t) \end{pmatrix} \left[\begin{pmatrix} p_1 \\ p_2 \end{pmatrix} + \begin{pmatrix} q_{11} & q_{12} \\ q_{21} & q_{22} \end{pmatrix} \begin{pmatrix} N_1(t) \\ N_2(t) \end{pmatrix} \right] \quad (2)$$

Boswijk, Fok & Franses (2006) assert that: “it makes more sense to assume that theoretical diffusion follows a deterministic S-shaped path, around which the actually observed diffusion process fluctuates where these fluctuations are caused by random events, individual-specific characteristics, or by marketing-mix effects”.

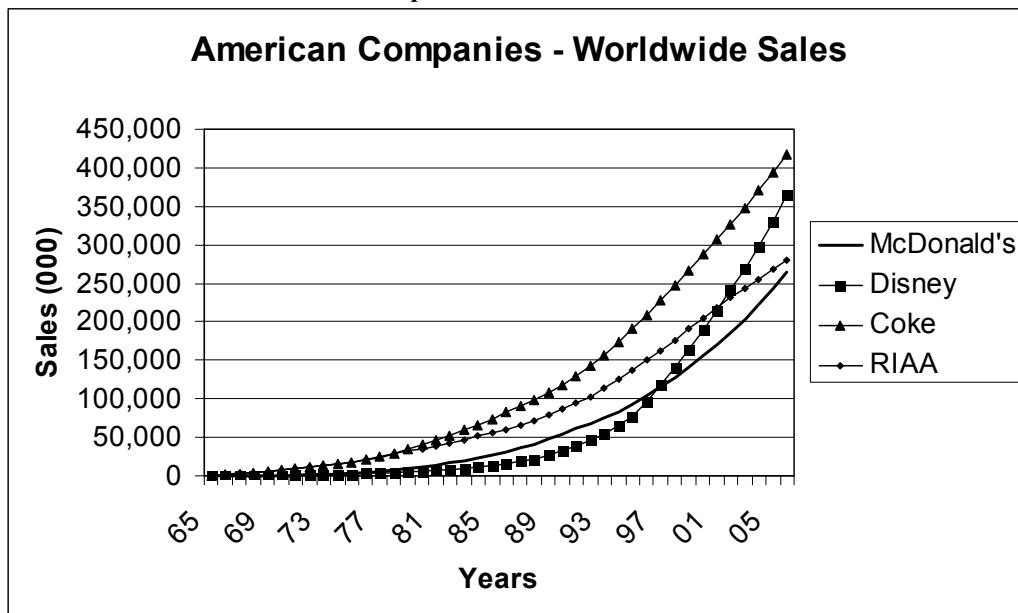
With that in mind we propose to get around the limitation of SAS® by modeling the diffusion following the deterministic path given by the BF (1) equation and use the residuals in order to model the dynamism in the data.

NON-LINEAR DYNAMIC MODEL: EXAMPLE OF INTERNATIONAL DIFFUSION

We propose to use the example of McDonald’s Restaurants’ diffusion worldwide looking at the series from 1965 until 2006. Our interest in the particular study is to deviate from the traditional “marketing” time-series multivariate analyses using advertising and sales as independent and dependant variables (Wei, 2006). In fact our hypothesis is that exogenous variables such as market conditions, rather than endogenous variables such as advertising, might be significantly correlated to the diffusion of McDonald’s. The market conditions that we hypothesize are the pioneering American product and services that have diffused ahead of McDonald’s and have created a favorable consumer attitudes toward McDonald’s. In other word we hypothesize that McDonald’s sales can be explained by the previous sales of other American products and services outside the U.S.

We are building a four company model using McDonald’s, Disney, Coca Cola and the Recording Industry Association of American (RIAA). All series have been obtained using the available financial reports and consists of yearly worldwide sales in dollars (figure 1).

Figure 1
American Companies Worldwide Sales 1965-2006



We are suggesting that given the time at which each company started its international diffusion (figure 2), McDonald’s, being the last of the group, benefited from the “western culture appetite” (Kahn, 1999) created by its predecessors, and that hypothetically Disney, RIAA and Coca Cola’s sales are leading indicators of McDonald’s sales.

This hypothesis is supported by the long time influence that these U.S. Companies have had on the global economy (Barber, 1995).

Figure 2
Brief Timeline

1934 Publication in Europe of “Mickey’s Journal”
 1951 Ike Turner’s “first rock song” *Rocket 88*
 1955 franchise begins in USA, McDonald’s Starts US development
 1955 Disneyland open – success of Mickey Mouse Club on TV
 1959 c.McDonald’s signs with Coca cola
 1960 Coke patent its z formula
 1967 McDonald’s in Canada
 1971 McDonald’s in Japan, Australia, and Europe

MODELLING THE DETERMINISTIC DIFFUSION

All four series are modeled in SAS® using the BF equation (2) and the least-square NLIN procedure.

The fit measures are the f-test and the pseudo- R^2 coefficient (Schabenberger, 2007). As can be seen in appendix 1 and 2 all series fit the original Bass model and the BF model very well. The R^2 is increased with the BF model, however the parameter m (maximum potential of cumulative sales for each company) is affected by the dynamic b coefficient. In order to deal with that we keep the m parameter as estimated in the original Bass equation and have the BF model converge on the other parameters. As seen in appendix 3 the model still fits very well the data, and the R^2 are not impacted significantly, showing levels higher than that of the original Bass model.

The next step is to model the residuals. We start looking at the autocorrelation function for each company and check for stationarity and found that all series are stationary. We then look at the residuals of the series to check for heteroskedasticity. We see that McDonald’s can be modeled as an autoregressive lag 1 series, and that Disney has two significant spikes, at lag 1 and lag 5 (AR (1,5)). After modeling these series’ error term we check all residuals and see that they are now white noise series.

Checking the cross-correlation function between our dependent variable McDonald’s and the other three Companies allows us to test a transfer function, as well as check for the pertinence of a vector autoregressive or error-correction model (Wei, 2006). The cross-correlation functions do not seem to show significant cumulative negative correlation indicating that more likely there is no feedback between the variables of interest and therefore possibly there is only a unidirectional relationship from each company to McDonald’s. We see that the Transfer function (TF) between McDonald’s and Coca Cola could have as parameters: $b=0$, $s=0$ or 1 , and $r=0$ or 1 . Using the AIC criterion in addition to the Portmanteau test for residuals allows us to define the best TF model to be: $b=2$, $s=1$, and $r=1$. Cross-correlation between McDonald’s and Disney suggest a TF parameters: $b=5$, $s=0$ or 1 and $r=0$. After checking the Portmanteau test we define a TF model with: $b=6$ and $s=1$, $r=0$ to be the best fitting model. Finally, the cross-correlation between McDonald’s and RIAA seems to have all zero parameters, however some lags show some borderline significant correlations. The best fitting model has a b parameter equal to 1 with s and r equal to 0.

The final transfer model (appendix 4) shows all parameters to be significant at the alpha level of 0.05 with the exception of the RIAA ω_0 parameter significant at the 0.10 level.

The residuals need to be modeled as well. After looking for conditional heteroskedasticity as suggested by Boswijk and Franses (2002) we did not find any ARCH effect, but found an AR (1,4) effect that seems to take care of the heterogeneity as evidenced by the white noise check.

The TF function explicit model can be written as:

$$McD_t = (-0.08 + 0.10B)B^6 DISN_t + \frac{(-0.19 - 0.26B)B^2}{(1 + 0.84B)} COKE_t + 0.12 RIAA_t + a_t$$

$$a_t = (1 - 0.56B + 0.41B^4)\varepsilon_t$$

DISCUSSION

As we can see in this example non-linear dynamic modeling for product growth can be useful in order to, not only determine the parameters allowing for managerial interpretation, but also to allow a causality test in the quasi-experimental setting of the time series analysis.

In addition to the transfer function estimation we show that there was no evidence of feedback, therefore no need for a vector AR or VECM model. Further, no ARCH or GARCH effect was uncovered.

In our example we see that we have sufficient evidence in favor of our hypothesis, and we can confidently say that Disney's sales lead to Mc Donald's sales with a 6 year lag, Coca cola's sales lead to Mc Donald's sales by a lag of 2 years, and that RIAA sales lead to the contemporary Mc Donald's sales.

Conducting a one-step ahead forecast for the year 2007 allows to test the model with the original Bass model and the BF (1) model. The Bass model predicts an increase of sales for McDonald's worldwide of M\$473.9, where the BF (1) model predicts an increase of B\$1.4674 and our transfer model sales of B\$1.5718. Actual sales for 2007 increased by B\$1.8914. Our model therefore shows a 5.5% improvement of the BF (1) model and 58% increase in accuracy over the Bass model.

Beyond the reduction of the forecasting error, the multivariate transfer model using exogenous companies as a predictor for McDonald's sales allows the forecasters to anticipate international adverse market effect month before the company releases advertising spending, or quarterly forecasts.

The limitation of our example lies in the fact that we only had a short series of 42 data points. Using quarterly sales would result in a better estimation of the different parameters, TF and possible error heteroskedasticity. Additionally, severe adverse market events, such as world recession or terrorist attacks, are not model in the transfer function particularly for short term forecasting, therefore the addition of a step-pulse intervention mechanism in the transfer function could allow for more precision.

Using a different software package than SAS® would also enable us to calculate the non-linear dynamic model parameters at the same time than the deterministic model parameters, and could result in a better forecast.

CONCLUSION

Although the use of a two step process – one deterministic the second dynamically modeling the residuals – would be sufficient to assess causality and forecast future sales, the limitation of SAS® currently forces the researcher to “work around” the system. In any case, we have been able to demonstrate how the diffusion literature can take advantage of complex modeling while retaining the explanatory power of the well known marketing models.

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APPENDIX 1

Original Bass Model parameter estimates and fit statistics

Bass model	Estimate Parameters			Fit Statistics	
	m	p	q	F test p-value	Pseudo-R2
Mc Sales	872081	0.000813	0.1171	<.0001	0.9940
Disney	588043	0.00008	0.2143	<.0001	0.9798
Coke	798069	0.00143	0.1107	<.0001	0.9866
RIAA	421707	0.000915	0.1229	<.0001	0.9630

APPENDIX 2

BF Model parameter estimates and fit statistics

BFM model	Estimate Parameters				Fit Statistics	
	m	p	q	b	F test p-value	Pseudo-R2
Mc Sales	714807	0.00024	0.0137	0.9531	<.0001	0.9983
Disney	486718	0.000435	0.0377	0.9076	<.0001	0.9896
Coke	696371	0.000551	0.0211	0.8544	<.0001	0.9944
RIAA	314209	0.000295	0.0277	0.8529	<.0001	0.9886

APPENDIX 3

BF Model with m fixed, parameter estimates and fit statistics

BFM model	Estimate Parameters				Fit Statistics	
	m - fixed	p	q	b	F test p-value	Pseudo-R2
Mc Sales	872081	0.000214	0.013	0.9509	<.0001	0.9983

Disney	588043	0.000495	0.0364	0.8852	<.0001	0.9894
Coke	798069	0.000579	0.0203	0.843	<.0001	0.9943
RIAA	421707	0.000817	0.0298	0.7594	<.0001	0.9858

APPENDIX 4

Transfer Function model with modeling of the AR (1, 4) error terms

Unconditional Least Squares Estimation							
Parameter	Estimate	Standard Error	t Value	Approx Pr > t	Lag	Variable	Shift
AR1,1	0.55979	0.14641	3.82	0.0007	1	mcdresid	0
AR1,2	-0.40838	0.13715	-2.98	0.0062	4	mcdresid	0
NUM1	-0.18520	0.06034	-3.07	0.0050	0	cokresid	2
NUM1,1	0.26062	0.06720	3.88	0.0006	1	cokresid	2
DEN1,1	-0.83812	0.09643	-8.69	<.0001	1	cokresid	2
NUM2	-0.08311	0.03902	-2.13	0.0428	0	disresid	6
NUM1,1	-0.10420	0.04184	-2.49	0.0195	1	disresid	6
NUM3	0.12193	0.06542	1.86	0.0737	0	riaresid	1

Variance Estimate	34253.58
Std Error Estimate	185.0772
AIC	459.8823
SBC	472.0932
Number of Residuals	34

FORECASTING THE NUMBER OF MEMBERS IN PRIVATE CLUBS

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ABSTRACT

The objective of this empirical study was to understand the influence that select demographic variables have on the number of members for private clubs (e.g.: country clubs, city-dining clubs, yacht clubs, and athletic clubs). Data was collected from private clubs in twenty cities across the United States. Information collected from each club included the number of members and different demographic variables within a ten mile radius around each club. The relationship between the dependent measurement (membership number) and the independent measurements (demographic variables and private club type) was explored using regression and other statistical methods.

Key Words: forecasting, memberships, demographics, private clubs

INTRODUCTION

The location of a business can often be the key component in determining the success or failure of that business. Location, or place as it is referred to in the marketing mix, is also one of the key components in the development of a marketing strategy for a business or organization. The location of the business can be a strength, a weakness, or have no effect on that business. Many hospitality businesses are somewhat dependent on their locations. A hospitality business' location could be considered a strength due to a number of reasons: its proximity to a customer's place of business, its proximity to a customer's place of residence, its convenience to or from one's residence, the physical beauty of the location, etc. (Lewis, Chambers, & Chacko 2004; Kotler, Bowen, & Makens, 2007).

Another important factor for hospitality businesses, such as restaurants, in regards to their location, is that many customers are only willing to travel a certain distance to purchase the businesses' products. Often, if the market is not near the business' location, it will not travel or travel as frequently to purchase the product. Therefore, in selecting a location, most businesses would prefer a location that is close to the market it is serving. Determining if the market segment a business wants to capture is present in that location is a difficult procedure. Some hospitality businesses have been able to identify their market segment based on demographic descriptors: age, gender, profession, income level, etc. (Druce, Frewin, & Gunn, 2003).

The intent of this project was to explore which demographic variables had the largest influence on membership size for private clubs (e.g.: country clubs, city-dining clubs, yacht clubs, and athletic clubs). This study investigated if there were any relationships between select demographic variables and the number of regular members at private clubs in major cities across the United States.

REVIEW OF LITERATURE

The hospitality industry's reliance on demographic description of its market segment has led many large hospitality businesses to make key decisions on acquisitions and development of properties based on the demographics of the location being considered. Some restaurant franchises mandate that any location being considered for acquisition or development first have a demographic profile developed before spending any additional resources or development time on the project (Taylor & Enz, 2002). This typically involves acquiring the demographics within a certain radius, such as 3 miles, to determine if there are a sufficient number of households within a certain income level, if there are enough businesses in the area, if there are enough people working in the area, if there is enough traffic flow past the proposed location, etc. The minimum demographic requirements are often derived from a company's records and demographic profiles of its successful and unsuccessful ventures. These demographic numbers are placed in the company's model to forecast potential sales for a proposed location (Melaniphy, 1992).

Over the past few decades, club demographics have changed with the economy. In the late 1980s, private clubs experienced a decline in the number of members and the club's members became more fiscally conservative, spending less money on luxury items and visiting their clubs less frequently (Wells, 1991). Many discriminatory clubs (Caucasian male-only private clubs) opened their memberships to women and previously banned ethnic and religious groups, creating more diverse member needs, both financially and socially (Ferreira, 2005).

Membership dues have been the largest source of revenue for both country clubs and city clubs for the last two decades. However, the ratio of dues to total revenue has decreased over this same 20 year period. "In 1981 dues accounted for over half of the total revenues, this percentage has decreased to just over 36% in 2000" (York, 2002, p. 148).

"Country clubs have enjoyed healthy membership growth over the past five years (1995-2000); however results for 2000 indicate a slowing in membership growth. Country clubs realized a minimal gain in the number of new memberships in 2000, growing less than 1% for the year" (York, 2002, p.147). This downturn continued after the 2001 terrorist acts and in 2002 the average club lost approximately 6% of its gross revenue, including dues. Most of this decline is attributed to less membership as "many clubs are having trouble attracting new members to replace the ones that are dropping out to save money. That's now prompting some exclusive clubs to become a little less exclusive" (Kouwe, 2003, p. 11).

Many clubs in the early 2000's were offering incentives to entice new members by significantly reducing initiation fees and dues. Another factor attributing to a slow down in membership is the stagnant growth in the game of golf. An excess supply of private and semi-private courses and the economic downturn were factors influencing private clubs to offer deals to attract members (Kaspriske, 2003).

Numerous traditional country and golf clubs are finding themselves in a marketing quandary. While marketing themselves as exclusive, many have chosen to reduce their fees significantly. Some examples include Quail Creek Country Club in Naples, Florida, which dropped their initiation fee from \$85,000 to \$35,000; Newport Beach Country Club in California dropped their initiation fee of \$42,000 significantly and payment could be spread over many years interest-free; at an Ontario, New York golf club the initiation fee dropped to zero, with monthly dues being the sole cost to new members (Kaspriske, 2003).

The downturn in the early 2000's impacted both member-owned clubs and proprietary for-profit clubs. ClubCorp, from 2000-2003, reported a loss in the number of total members by country and golf clubs owned and operated by ClubCorp. In 2003, John Beckert, chief operating officer for ClubCorp, stated the company lost more members than it added over the last three years. ClubCorp is a for-profit company that owns or operates more than 150 private city, golf, and country clubs world-wide. In an effort to reverse this trend ClubCorp began offering and marketing numerous membership categories and offering a membership amenity (with a slight increase in membership dues) that allows its members at most of its clubs the ability to play any ClubCorp golf course (at country clubs, golf clubs, and resorts) and only pay cart fees (Kaspriske, 2003).

With fewer clubs having a waiting list for membership, the bar for admittance to a private club has been lowered. "There are many competing options available for existing and potential members. No longer is it as exclusive to join a fine club" (McMahon, 2001, p. 22). This raises many concerns because exclusivity is one of the most important attributes of a private club. This attribute that entices some members to join a private club, is in jeopardy.

The decline in the overall number of clubs members in 2003 from 2000 was indicated in the bi-annual national surveys conducted by the two major private club associations within the United States, CMAA (CMAA, 2000 and CMAA, 2003) and National Club Association (NCA, 2000). These results support the concept noted in *Club Industry Magazine's* State of the Industry (2003) report that club managers are concerned about growing the membership and retention of their current members.

Fewer clubs reported having a waitlist during the economic downturn from 2000 to 2003, this was similar to the number reported in the economic downturn of the early 1990s (mid 20% range) (Ferreira, 2002). The percentage of clubs reporting a waitlist during economic boom periods from 1980-2000 never exceeded the mid

30% range, similar to the 36% reported in 2000. The most exclusive clubs that have a waitlist for all membership categories were not affected as severely by the economic downturn. The percentage of clubs that have a waitlist in all categories reported a very small change, from just 11% in 2000 to 10% in 2003 (Ferreira, 2003).

There have been very few academic studies completed with private clubs in the hospitality industry (Barrows, 1999). Furthermore, because of the exclusive nature of private clubs, the topic of marketing is one that many clubs have been reluctant to address. Many private clubs, today, find that they do not have a waiting list for members and that revenues have declined because of the following factors: overbuilding of private clubs, poor economics, companies downsizing management positions, companies moving from downtown areas to the suburbs, more competition from other hospitality businesses, etc. (Kaspriske, 2003).

A recent survey conducted by the Club Managers Association of America (CMAA) indicated that the marketing and selling of memberships was a high priority for club managers in that association. This interest in the marketing of private clubs to increase membership has occurred recently. The majority of clubs across the country are now seeking members, whereas a decade ago these same clubs had a waiting list of individuals wanting to be members. Less members result in a decrease in revenues, initiation fees, dues income, covers, etc. and possibly a decrease in gross operating profit for the club (Ferreira, 2007).

An analysis of the variables that could possibly influence the membership size and financial performance of a private club is needed, given the state of the industry. Information on market penetration rates, market share and the impact of demographics is not available in the private club industry (Ferreira, 2005). The purpose of this study was to address some of these important issues.

METHODOLOGY

The intent of this study was to determine which demographic variables, if any, account for the variance in a club's membership size. The demographic variables were measured at a ten mile radius around each private club. The demographic variables collected from the clubs were the number of residents, owner occupied households, properties over \$150,000 in value, households with over \$100,000 income, businesses, CEOs/executives/professionals, and individuals with a college degree.

The subjects were private clubs (country clubs, city clubs, city-athletic clubs, and yacht clubs) whose managers were members of the Club Managers Association of America and have been in operation for five or more years located in 20 greater metropolitan areas in the United States as listed in Table 1.

Table 1
US Metropolitan Areas

- | | |
|------------------|---------------------|
| • Atlanta, GA | • Los Angeles, CA |
| • Austin, TX | • Kansas City, MO |
| • Boston, MA | • Minneapolis, MN |
| • Charlotte, NC | • New York, NY |
| • Chicago, IL | • Pittsburgh, PA |
| • Cincinnati, OH | • Phoenix, AZ |
| • Dallas, TX | • San Antonio, TX |
| • Denver, CO | • San Francisco, CA |
| • Houston, TX | • Seattle, WA |
| • Las Vegas, NV | • Tampa, FL |

The demographic information for each of the private club's location was provided by PCensus. The data collected from the private clubs and the demographic variables for each club was analyzed using the SPSS/PC+ statistical package. Significant relationships among the performance measurement and the demographic variables were explored through correlation coefficients and stepwise regression analysis.

RESULTS

Responses were received from 312 clubs for a response rate of 51 percent (600 clubs sent a survey). Table 2 displays the means and standard deviations for the dependent performance variable (number of full-privilege members) and the seven demographic or independent variables for the private clubs. There was no difference in the mean number of members based on the club's city (location) or club type (country, city-dining, yacht, and athletic).

Table 2
Private Club Variables

Characteristic	<i>n</i>	Mean	Std. Dev.
Performance Variable			
Number of Full-Privilege Members	312	914.66	984.99
Demographic Variables Within Ten Mile Radius			
Residential Population	312	787,789.45	361,058.73
Owner Occupied Households	312	356,787.25	186,682.28
Property Values	312	\$116,973.27	\$66,426.13
Household Income Levels	312	\$51,678.95	\$36,899.69
Number of Businesses	312	125,860.77	66,670.43
Number of CEO's/Executives	312	136,114.21	75,485.85
Number With College Degree	312	178,851.34	81,875.93

Table 3 lists the correlation values among the variables. The following statistically significant correlations existed between the dependent performance variable (number of members) and the independent (demographic) variables. The number of full-privilege members significantly correlated with the number of businesses (.63), property values (.58), owner occupied households (.57), number of CEO's/executives (.56), and household income levels (.55).

Table 3
Correlation of Private Club Variables

Variables		Correlation Coefficients							
		1	2	3	4	5	6	7	8
1	Number of Full-Privilege Members	-							
2	Residential Population	.17	-						
3	Owner Occupied Households	.57 *	.39	-					
4	Property Values	.58 *	-.12	.47	-				
5	Household Income Levels	.55 *	-.09	.43	.50	-			
6	Number of Businesses	-.63 *	.19	.16	.17	.08	-		
7	Number of CEOs Executives/Mgrs.	.56 *	.09	.21	-.14	.04	.44	-	
8	Number With College Degree	.04	-.11	.09	-.03	.07	.17	.51	-

* Significant at .001 level

The variance in the number of members in a private club could be explained from four of the demographic variables, measured within a ten mile radius of the clubs.

In Table 4, the results of a stepwise regression analysis indicated that the dependent variable's variance could be significantly explained by a select number of demographic variables. The variance in the number of full-privilege members a club had ($R^2 = .56$) was related to the number of businesses, the number of property values over \$200,000, the number of households having income levels over \$150,000, and the number of CEOs/executives/professionals. This was significant at the .01 level.

Table 4
Results from Stepwise Regression Analyses of the Relationship
Among the Characteristics of Private Clubs and the Performance Variable

Dependent Variable	Independent Variables	B	beta	F	R Square
Number of Full-Privilege Members	Number of businesses	.0014	.98		
	Property values	.0012	.44		
	Household income levels	.0046	.38		
	Number of CEOs/executives	.0028	.47		
	Constant	69.85		28.31*	.56

* Significant at .01 level

CONCLUSIONS

This research project confirmed the findings from other hospitality businesses, especially restaurants, that the demographic makeup of a location has an impact on a business (Druce, Frewin, & Gunn, 2003). In this study, four demographic variables had an impact on the number of members a private club had. As the number of households with income levels of over \$150,000, the number of properties valued at over \$200,000, number of businesses and the number of CEO/executives increased, so did the club's number of members. In other words, as the demographic variables that measure one's wealth (income, property value, and professional positions) increased, so did the club's ability to attract these individuals as members of a club.

Obviously, when there are many individuals with high income residing near the club, there will also be a large pool of prospective candidates for membership there as well. Moreover, if a club is conveniently located to a member's business, it becomes more attractive for membership. Members join a club typically that is conveniently located to their residence, their place of business, or both (Ferreira, 2007). Many club members are CEOs, executives, owners, or professionals. The larger the pool of individuals that fit this profile, the larger the number of prospective candidates for club membership (Ferreira & Gustafson, 2006).

This research project was one of the first of its type in the private club industry. Other hospitality businesses (hotels and restaurants) have completed similar extensive market research studies. The information is imperative given the increased competitive nature within the private club industry (Kaspriske, 2003).

Based on the results of this study, private clubs should analyze the demographic make-up of the area around the club to see if their location is favorable. An analysis of the area can help to explain a club's performance in attracting membership candidates.

LIMITATIONS AND FUTURE RESEARCH

The findings of this study are limited in their application. The first limitation is the sample size of 312 private clubs in 20 major metropolitan areas. The study should be replicated with clubs in smaller cities and towns.

Future studies should explore different radii lengths from the club's location and other demographic or psycho-graphic variables. The additional variables at various radii lengths may better explain the variance in a club's performance level. Moreover, future studies should be expanded to include both non-member and member owned clubs and profit and non-profit clubs to see if the variables that affect member owned clubs affect non-member owned clubs in the same manner.

This proposed research project represents a significant contribution to the private club industry. For academicians it is the first attempt to demonstrate the relationship between performance and the demographic variables around a member-owned private club's location.

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**GENERATIONAL DIFFERENCES IN RELATION TO ASSOCIATION MEMBERSHIP AND
CONFERENCE ATTENDANCE**

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ABSTRACT

The objective of the study was to identify the behaviors and perceptions of the different generations in the workforce in relation to association membership and conference attendance. Specifically, longevity of membership, conference motivators, and conference inhibitors were explored. Differences between and among the Matures, the Baby Boomers, Generation X, and Generation Y are reported. The results will be useful to association managers and conference planners as they design programs for a diverse and changing membership.

Key Words: generations, conference attendance, associations

INTRODUCTION

Today's four generation workforce offers a unique landscape as the generations differ in definitions of success, measuring time, and displaying loyalties. Large portions of the workforce are members of professional associations. Association planners are charged with fulfilling their memberships' educational, networking and business needs. The Professional Convention Management Association (PCMA), for example, provides association executives, planners and suppliers with such support. To provide maximum benefit to association members, it is essential conference planners understand differences between the generational groups whom attend meetings. The aim of this study, thus, was to gain a better understanding of differences between generations so that conference planners may better serve their attendees. The following article provides an overview of the four generation workforce to offer a better understanding of their behaviors, patterns, and concerns. The article continues with the objectives of the research, the methodology, the findings, and the implications of the present study.

Generations are identifiable by birth year and are potentially influenced by significant life experiences during their personal and professional development. The following provides a brief overview of the four generation workforce; Matures, Baby Boomers, Generation X, Generation Y.

Matures, known as the Veterans, Silents, or the Greatest Generation, were born prior to 1945. Matures value family and patriotism, had a parent at home to raise the children, preferred consistency, and generally remained with one company over time (Allen, 2004). Baby Boomers, born 1945-1964, believe in growth, change, and expansion. They have grown up in an era ranging from unprecedented economic growth to corporate downsizing.

Boomers want it all, are willing to work long hours to achieve their goals, and they measure success materially (Eisner, 2005; Kupperschmidt, 2000). They tend to be social and attribute networking as key in career building success. An increased divorce rate during for this generation, unfortunately, has been a consequence of their work.

Generation X, born 1965-1980, have been raised by the workaholic Baby Boomer generation just described. Generation X were often referred to as latchkey kids. Parents were often not home during child rearing years, possibly due to parents working, divorce, or having parents who simply needed multiple jobs to survive financially. Consequently, Generation X tend to lack social skills but are strong with technology. They tend to be reluctant to network for job advancement. They are also individualistic, distrustful of corporations, and lack loyalty (Eisner, 2005). They are unwilling to sacrifice their personal lives for a career (Krug, 1998).

Generation Y, born after 1980, are also known as the Millenials or the Internet Generation. Generation Y is showing tendencies similar to the Matures; patriotic, sociable, valuing home and family. This generation is the most technically literate, desires intellectual challenge, seeks professional development, and strives to make a difference. Succeeding personally and professionally, in addition to working collaboratively with co-workers representing their shared values, appears to be motivators (Eisner, 2005).

Previous research relating to association and conference participation issues has also been evident in the literature. Research has shown that association membership increases retention within the profession (Blau and Lunz, 1999). Unfortunately, the number of workers seeking professional development opportunities within associations has been found to decline for members older than 55 years of age (Schamback, 2001). Generation X, unsurprisingly, prefers to solve problems by themselves and uncollaboratively (Yrle, Harman, and Payne, 2005). And in regards to compatibility, 60% of human resource professionals in large companies report conflict between the younger and older workforce (Eisner, 2005). Such generational differences may potentially influence decisions regarding future professional development participation, subsequently affecting conference attendance. Surprisingly, there has been little research linking generational behaviors and perceptions with association membership and conference attendance. The present study was designed to fill this research gap.

METHODOLOGY

The objectives of this study were to identify the behaviors and perceptions of the different generations in the workforce in relation to association membership and conference attendance. More specifically, the core objectives of this study were:

- 1) to identify the longevity of association membership
- 2) to identify motivators for conference attendance
- 3) to identify inhibitors that may prevent conference attendance

An electronic survey was developed based on a review of literature and objectives set forth for this study. PCMA commissioned the study. The final survey was approved by the PCMA Industry Research Committee prior to survey distribution. The online survey included 16 questions, ranging from general demographics to motivating and inhibiting factors of meeting attendance.

PCMA leaders identified planner members to participate and distribute the survey to the members of their associations. Four planners agreed to participate in the study and survey their members. The researchers explained the rationale and procedures of the survey to the participating members. The members who voluntarily agreed to participate received instruction from the researchers with regards to distribution of the survey. In short, the members were asked to email their association members alerting them to the fact that they would be receiving a link to anonymous survey. Each member was to explain the purpose of the survey, and to ask for their participation. Each member was asked to send a second email to their associations. The second email was to include a letter from the researchers officially explaining the research project, to explain the informed consent process, and to provide the survey link. Each member was then asked to send out a third email to their associations, approximately a week after sending out the survey link, thanking them for participation in the survey and/or to remind them to fill out the survey.

The survey sample was a convenience sample based on voluntary participation of individuals who were members of one of the four associations. Each survey link had a special code to identify association specific data. Data was received electronically and stored on a password protected computer. Survey results were entered into SPSS for data analysis. For purposes of this study, descriptive statistics are reported by the different generational groups.

FINDINGS AND DISCUSSION

The study population was identified by generation, gender, workforce longevity, career stage, membership longevity, and professional longevity. There were a total of 885 survey respondents representing four associations, two trade and two medical/health care associations. Specific to the generation analysis, Matures represent ages 62+; Baby Boomers represent ages 43-61, Generation X represents ages 27-42, and Generation Y represents ages 18-26. The Matures had a 7.5% representation in the present study. The Baby Boomer generation had the largest representation, reporting 70.5%. Generation X totaled 18.5% of the respondents and Generation Y made up just over one percent (1.2%) of the respondents. Approximately two percent did not report their age. In addition, the majority of respondents (73%) were female, 18% were male, and 8% did not identify their gender.

Workforce longevity was reported by four categories and represents how long the respondents have been in the workforce full-time. Table 1 depicts the frequencies for each longevity category by generation. Career stages were reported by four categories; first, second, third, or fourth career. The majority of respondents were in their first or second career, 59.1% and 29.2% respectively. Approximately 8% of the respondents were in their third career, and approximately 4% were in their fourth career.

Table 1
Workforce Longevity

	Matures		Baby Boomers		Generation X		Generation Y	
	N	%	N	%	N	%	N	%
First 5 years	0	0	6	1	13	8	7	64
6 – 10 years	0	0	11	2	45	28	4	36
11 – 20 years	4	6	60	10	88	54	0	0
21+ years	62	94	544	88	17	10	0	0
Total	66	8	621	72	163	19	11	1

Respondents were asked how long they have been a member of their respective association. Table 2 reflects the membership longevity of all respondents by generation. The reported frequency indicates the majority of the mature generation respondents have been members of their respective association a minimum of 11 years. Surprisingly, the longevity category with the most representation for Baby Boomers and Generation X was 1-5 years. The majority of Generation Y have been a member of their respective association less than one year, 63.6%.

Table 2
Membership Longevity

	Matures		Baby Boomers		Generation X		Generation Y	
	N	%	N	%	N	%	N	%
Less than 1 year	-	-	69	11.1	37	22.6	7	63.6
1 – 5 years	7	10.6	182	29.4	85	51.8	3	27.3
6 – 10 years	5	7.6	120	19.4	21	12.8	-	-
11 – 15 years	11	16.7	97	15.7	15	9.1	-	-
16 – 20 years	18	27.3	76	12.3	4	2.4	-	-
More than 21 years	25	37.9	75	12.1	2	1.2	-	-

Respondents were asked how many years they have been in their current profession. Not surprisingly, the highest representation for the Matures and the Baby Boomers, in terms of longevity, was the category of 16+ years; 70% and 60%, respectively. Eleven percent of the Matures reported their profession longevity between 11-15 years, 4.5% between 6-10 years, 10.6% between 3-5 years, and 4.5% representing the longevity of 2 years or less. Approximately 10% of the Baby Boomers have worked in their profession 11-15 years, 12% reported 6-10 years in their current profession, 8% are in years 3-5 years, and 11% have been in their profession two years or less. Generation X respondents reported similar findings for three of the longevity categories; 21% for 11-15 years,

22.2% for 6-10 years, and 21.6% for 3-5 years. Identical findings were reported for 16+ years and 1-2 years in their respective profession; 13% for both categories. Approximately 9% of the Generation X respondents have been in their current profession less than 1 year. Not surprisingly, all of the Generation Y respondents have been in their current profession five years or less. Approximately 46% reported 3-5 years of profession longevity, 18% reported 1-2 years of longevity, and 36% have been in their profession in less than 1 year.

Twenty four motivators and 16 inhibitors to conference attendance, identified from the literature review and industry professionals, were also examined in this study. A five point Likert scale was utilized to identify the influence of such factors on conference attendance. The top five motivators and inhibitors are reported by total population and by generation from the present study.

The leading motivators for conference attendance for all respondents, in descending order, were available medical facilities, making new friends, time away from the office, learning from different generations, and participation in the meeting. By generation, the Matures, Baby Boomers, and Generation X respondents revealed similar leading motivators. Each reported available medical facilities, making new friends, meeting friends, and time away from office as their four leading motivators influencing their conference attendance. In addition, Matures listed career enhancement, Baby Boomers listed learning from other generations and participation in meetings, and Generation X listed learning from other generations as the balance of the top five influences for their conference attendance. Generation Y, surprisingly, reported the same leading motivators as the other generations; available medical facilities, time away from the office, meeting friends, and making friends. Differences were reported for the fifth motivator. Generation Y rated the following motivators influencing their decision to attend conferences; cost of accommodations, cost of registration, being actively involved in the association, length of conference, continuing education, and assessable location.

The leading inhibitors influencing conference attendance for all respondents were, in descending order, family unable to travel, meeting location surroundings not of interest to myself or my family, location of the meeting not desirable, location of the meeting was too far from home, length of meeting too long, length of meeting too short to justify trip, and the delivery mode. By generation, the Matures revealed similar leading inhibitors, including family unable to travel and the meeting location surroundings not of interest to myself or my family. Family obligations, length of meeting too short or too long, location of the meeting was undesirable, and financial hardships were also inhibitors to meeting attendance for the Matures. Surprisingly, Baby Boomers, Generation X, and Generation Y respondents reported similar inhibitors to meeting attendance; family unable to travel, meeting location surroundings not of interest to myself or my family, location of the meeting not desirable, and location of the meeting was too far from home. The fifth ranked inhibitor, however, differed by generation. Baby Boomers reported the delivery mode of the meetings, Generation X reported length of meetings too long, and Generation Y reported unsatisfactory accommodations as inhibitors to their respective meeting attendance.

CONCLUSIONS AND RECOMMENDATIONS

The researchers were expecting more PCMA planner members to participate in the survey. Due to participation from only four associations, it would be difficult to conclude that the present findings are a solid representation for all PCMA planner members and their constituents. In addition, Generation Y did not have strong representation and the same conclusion may be true. Generation Y is just entering the workforce and may or may not be active participants in their related associations. Encouraging involvement from Generation Y, enhancing the same from Generation X, and maintaining Baby Boomer and the Matures' interest level is essential for the future growth of the industry. The following discussion areas will provide strategies to promote future membership and meeting attendance growth for the industry.

A generation is shaped by events and circumstances during various life stages. Generation Y has experienced more parental involvement than previous generations. In fact, reports often characterize parents of Generation Y as "helicopter parents", hovering over their children in all of their interests. Generation Y has been raised to believe that they can make a difference and is entering the workforce with a strong interest in civics and a sense of social responsibility. More importantly, perhaps, they have the same expectations for their employers. According to *USA Today* (October 6, 2006), 81% of the 1800 Generation Y polled have volunteered during the past year, 69% consider a company's social and environmental commitment when deciding where to shop, and 83% trust a company more if it is socially/environmentally responsible. It would be a recommendation for associations to

market their past and future involvement with meaningful charitable activities as a way of connecting with Generation Y members. Another recommendation is that meetings, whether local, regional, national, or international, provide an opportunity for volunteerism in and for the local host community.

Mentorship programs and activities should also be a future consideration, potentially involving all generations. Generation Y has been accustomed to guidance from their elders. Baby Boomers dominate not only the workforce but also in membership affiliation. Encouraging a mentorship program where the Baby Boomers, and possibly the Matures, become mentors to Generation X and Y would not only enhance involvement within the association but mirror Generation Y's upbringing. Such a link might also temper the lack of trust and individualism often associated with Generation X. Generation X tends to be free agents and has received very little training, organized development, and/or mentoring in the workplace. Generation X will soon be the population to replace the retiring Baby Boomers and efforts to increase their involvement and collaborative efforts should be implemented. Important to note and with close relation to such recommendation, one of the leading motivators for Baby Boomers and Generation X respondents was learning from different generations.

Associations and meeting planners should continue to enhance and align themselves with corporate sponsors and products of interest to the Generation X and Y members. For example, relationships with the latest and greatest technology advancements would appeal to membership affiliation and possible enticement for future meeting attendance.

Associations and conventions are tremendous vehicles for training. Importantly, delivery mode was listed as a primary inhibitor to meeting attendance. Generation Y benefits most from and requests hands on, team based training. Associations and meetings delivering experiential training may be very attractive to this generation, resulting again in increased membership and involvement. In addition, communication and problem solving programs should also prove beneficial to Generation Y. Generation Y has developed through email, instant messaging, text messaging, and chat rooms. Such modes of communication are great for electronically based interaction; however, professional face to face communication requires a different set of skills. And Gen Y has not mastered these skills. This may result in miscommunications. Such training programs would benefit all generations as each generation can learn from each other's diversified strengths and experiences. Conveniently, learning from different generations was a leading motivator for conference attendance.

Social networking is extremely popular with Generation Y and the younger members of Generation X, expressing themselves via the networking sites of Facebook, MySpace, and MyYearbook. It is our recommendation for associations to explore affiliations with social networking sites as an alternative vehicle for promoting membership and meeting activities. Such strategy may temper a few of the noted inhibitors for meeting attendance such as undesirable locations and cost factors associated with attendance.

Finally, the study revealed similarities and differences between generations, specifically in their motivators and inhibitors to meeting attendance. Continual research is recommended to identify if factors are generational in nature, thus changing as the members age, or if generation specific factors identified with their present generation will remain somewhat unchanged as they transcend into their next generation category.

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**A STEP TOWARD THE IDENTIFICATION OF UNSYSTEMATIC RISK FACTORS: THE CASE OF
FOREIGN EXCHANGE EXPOSURE AND PROPERTY OWNERSHIP STRUCTURE OF U.S.
MULTINATIONAL HOTEL COMPANIES**

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ABSTRACT

Recent empirical results showed that traditional asset pricing models are inefficient in estimating the cost of equity capital. Several authors suggested that asset pricing models that include some measure of unsystematic risk factors were better able to predict stock returns. In this study, two unsystematic risk components are empirically tested in the context of the U.S. multinational hotel industry: the foreign exchange exposure and the property ownership structure. The empirical results show that the property ownership structure is a significant risk factor for the multinational hotel industry, but that the foreign exchange exposure is not.

Key Words: capital asset pricing models, foreign exchange exposure, risk, property ownership structure

INTRODUCTION

As 2007 ended, U.S. stock markets remained under pressure as investors continued to fear a recession triggered by further increases in Oil prices, a never-ending depreciation of the U.S. Dollar and more corporate losses due the subprime mortgage crisis. In recent years, the uncertainties surrounding the state of the economy have ballooned to a point where investors appear to be incapable of assessing the value and risk exposure of companies with confidence. The increased volatility in stock prices reflects in part the changing risks present in our current economies, but it is also due to the rather inefficient asset pricing models commonly used.

The generally accepted model for estimating the required returns and prices of securities is the Capital Asset Pricing Model (CAPM) of Sharpe (1964) and Lintner (1965). Graham and Harvey (2001) reported that more than 70% of the CFOs of Fortune 500 companies were using the CAPM when estimating their cost of capital. The CAPM is a single risk factor model that has a strong theoretical foundation and that has gained popularity due to its simple empirical form and ease of use. However, over the past 15 years, strong evidence has been developed that highlighted the inefficiencies of the model (Fama & French, 1992; Roll & Ross, 1994). Especially, the reliance of the model on a single systematic risk factor has been viewed as poorly reflecting what investors actually value. A number of scholars have called for the inclusion of unsystematic risk factors that would better represent the exposure and volatility of the cash flows of the securitized asset.

The identification and study of such unsystematic risk factors requires one to concentrate on groups of heterogeneous firms as these factors need to encompass sources of risk that are either firm or industry specific. Indeed, as industries and companies evolve, they develop business models that produce cash flows in different ways than other industries, and that are exposed to other sources of risk. The U.S. hotel industry is a valuable field of study in this context. Over the past two decades, U.S. multinational hotel companies have rapidly expanded their international operations. The favored growth vectors have been the addition of new rooms through management contracts and franchise agreements (Blomstermo & Sharma, 2006; Olsen, West, & Tse, 2007). In addition to expanding overseas, U.S. hotel companies have also embraced asset-light strategies, selling off most of their properties while retaining their management (Sebbane, 2007). These major trends have changed the fundamentals of the industry. The cash flows of U.S. multinational hotel firms, once essentially produced from domestic owned real estate assets, are now for the most part generated through fee-based contracts and increasingly from foreign operations. These structural changes have altered the risk profile of the industry and correspond to new unsystematic risk factors.

Despite the recognized need to improve upon the traditional asset pricing models and the necessity to identify unsystematic risk factors, only one conceptual study has been conducted in the context of the international hotel industry (Madanoglu & Olsen, 2005), and no empirical test has been performed. This paper aims to fill part of

this gap by investigating the role of two unsystematic risk factors directly related to the structural changes observed in the industry: the foreign exchange exposure and the property ownership structure.

The foreign exchange exposure represents the risk of unexpected changes in future cash flows that are due to changes in foreign exchange rates (Shapiro, 2006). This risk factor primarily exists when firms generate cash flows denominated in foreign currencies, which is increasingly the case for U.S. multinational hotel firms. The second unsystematic risk factor, the property ownership structure, corresponds to the proportion of cash flow that is produced via fee-based contracts as opposed to cash flows from owned or leased properties. Fee-based cash flows have been presented as being less volatile and risky than cash flows from owned and leased properties (Madanoglu & Olsen, 2005; Roh, 2002). The present effort was thus designed to answer the following research questions:

1. Is the foreign exchange exposure of U.S. multinational hotel companies a significant risk factor that is valued by equity investors?
2. Is the property ownership structure of U.S. multinational hotel companies a significant risk factor that is valued by equity investors?

LITERATURE REVIEW

Exchange rate exposure and firm value

Dumas (1978) defined foreign exchange economic exposure as the changes in the real value of the firm that are due to changes in exchange rates. This concept of exposure corresponds to effect of exchange rate changes that modify the value of the foreign-currency-denominated cash flows generated by the firm or by the value of some of its real assets that is denominated in a foreign currency.

Shapiro (2006) differentiated between two generic types of exposure. Translation exposure refers to the changes in the reported value of foreign-currency-denominated real assets due to exchange rates fluctuation. This type of accounting exposure is driven by the need of multinationals to consolidate their financial statements for reporting purposes. While such exposure may alter balance sheet and income statement items, they are not necessarily influencing the value of the firm. In contrast, economic exposure refers to changes in the amount of future operating cash flows triggered by changes in exchange rates, or by the changes in the value of pending contracts denominated in foreign currencies. Key to the differentiation of both types of exposure is the uncertainty about the amount exposed, and the subsequent potential hedges firms may undertake. Exposure of future foreign-currency-denominated cash flows are indeed more difficult to hedge as the amount is not known with certainty, while transaction exposure, where the amount is contractually stated, is easier to hedge (Shapiro, 2006).

Several authors have studied the influence of exposure on the value of firms or industries. Jorion (1990) investigated the exchange rate exposure of 287 U.S. multinational firms. Using several regression models, he found some evidence that the relationship between stock price and changes in exchange rates differed across firms. He also found that the percentage of foreign operations, measured by the ratio of foreign to total sales, was a significant determinant of exposure as estimated by a regression coefficient.

Bodnar and Gentry (1993) studied the industry-level foreign exchange exposure in three countries. Classifying industries based on standard classification schemes (e.g. SIC for the US), they modeled exposure by introducing the changes in the trade weighted nominal exchange rates of each country into the capital asset pricing model (CAPM). Using seemingly unrelated regressions, they found several industries displaying significant exposure. The authors also found that the broad hotel industry in the U.S. (SIC code 70) had a positive but only weakly significant exposure to exchange rates.

Faff and Marshall (2005) investigated the determinants of exchange rate exposure of multinational corporations. They found that multinational companies differed in terms of their exposure not only due to industry or firm-specific characteristics, but also in terms of regional location. In other words, corporations from the UK appeared to have opposite exposures than similar US firms (similar in terms of business, size and scope). They concluded that further research should consider the geographic location of both import and export activities of the firms, as well as the structure of the foreign cash flows.

Building on prior studies and attempting to extend and validate previous results, El-Masry (2006) delved into the exchange rate exposure of non-financial companies in the U.K. In order to test the results of prior studies and to evaluate diverging methodologies, he used both unexpected and actual exchange rates, as well as real and

nominal rates. The author found that a number of firms and industries had a significant exposure and that the results for real and nominal rates as well as for actual and unexpected rate changes were essentially similar.

What emerges from these studies on exchange rate exposure is that its significance on the value of firms is dependent upon some specific characteristics of industries and firms. As the review of the prior works shows, no general theory can be inferred from the empirical results. Conflicting evidences on the importance of exposure, its sign and the role of hedging strategies demonstrate the needs to control for more industry and firm specific factors when analyzing exchange rate exposure and risk. As suggested by Faff and Marshall (2005), the nature of the cash flows generated by the firms also needs consideration as some cash flows are more stable than other, and thus can be better hedged against exchange rate changes (Shapiro, 2006). The following section reviews some of the key factors that specifically influence the risk exposure of multinational hotel companies.

Risk characteristics of the hospitality industry

Initial studies on risk in the lodging industry have principally dealt with industry sales volatility and the risk-adjusted techniques used by executives in their capital budgeting decisions (Slattery & Olsen, 1984). Other studies have tested the effectiveness of general asset pricing models such as the CAPM in the context of the industry and concluded that the model was not relevant for industry professionals and academics (Sheel, 1995). Barrows and Naka (1994) for instance, tested the APT presented in its empirical form by Chen et al. (1986) for three industry groups. Using several multiple regressions for each portfolio, they found limited support for the models as only 12.1%, 7.8% and 9.1% of the variance in the stock returns was explained by the equation for the restaurant, lodging and industrial group respectively. Other authors have in turn examined the determinants of the betas of the restaurant and lodging industries (Huo & Kwansa, 1994), or have investigated the risk and return in the hospitality industry (e.g. Kim & Gu, 2003). Yet, as in the mainstream finance field (e.g. Fama & French, 1996), the limited predictive power of asset pricing models relying solely on measures of systematic risk lead several authors to investigate industry and firm specific risk factors.

Madanoglu and Olsen (2005) proposed an industry specific factor model that was intended to account for both systematic and unsystematic risk components of stock returns. In their conceptual paper, they suggested that factors such as human capital, brand strength, technology utilization, safety and security index, and other industry specific elements were critical to the accurate evaluation of risk for hotel companies. For the industry specific elements, they argued that the most important factor would be the property ownership structure of the firms. Drawing on research in franchising and management contracts (e.g. Roh, 2002), the authors claimed that highly franchised corporations would benefit from transferring part of their business and financial risk to their franchisees. This transfer of risk is expected to influence risks that are associated with the volatility of the cash flows from operation, as well as the risk associated with the investment in real assets. As suggested by the authors, franchised operations provide a more stable cash flow than owned or managed properties which rely more heavily on incentive-based fees. With regards to the risks associated with the ownership of real assets, franchisors are able to pass on the financial risk linked with some locations to their franchisees (Martin, 1988).

Synthesis and hypotheses

The literature reviewed thus far emphasized a number of important features of the foreign exchange exposure and property ownership structure. First, it appears that the significance and sign of the exchange rate exposure differ across industries and firms. While foreign exchange exposure has been tested to be highly significant statistically and practically in some cases, it has also been recognized as not being significant at all in other settings. Among the major determinants of exposure, the degree of foreign sales relative to total sales came out to be the most influential and sound. As firms exhibit different ratios of foreign sales to total sales, it is expected that their exposure will differ from one to another. As firms with a high ratio of foreign sales have been repeatedly found to bear more exposure, it is expected that multinational hotel firms will also show significant exposure. In addition, as part of the home sales of hotel companies can be defined as exports (i.e. when they sell rooms to foreigners), it is expected that all hotel companies will bear a significant exposure regardless of their proportion of foreign sales. More specifically, the hotel industry being viewed as an export industry, a depreciation of the U.S. Dollar is expected to cause higher returns. Consequently, it is hypothesized that:

Hypothesis 1a: The foreign exchange exposure of the U.S. multinational hotel industry is significant and negative; the lower the value of the U.S. Dollar relative to other major currencies, the higher the returns.

Hypothesis 1b: The foreign exchange exposure of individual firms of the U.S. multinational hotel industry is significant and negative; the lower the value of the U.S. Dollar relative to other major currencies, the higher the returns.

When considering industry specific factors, it appears that the U.S. hotel industry possesses a key characteristic that potentially influences the risk associated with their cash flows. Madanoglu and Olsen (2005) argued that property ownership structure was an influential industry-specific risk factor. In their views, such construct would be best captured by the percentage of revenue from franchised operations to those from owned and managed properties. While their argument provides some reasons to perceive franchised fees as less risky than management contract fees, financial theories appear to draw the line between risky operations and less risky operations differently. Indeed, as suggested by Huo and Kwansa (1994) and Madanoglu and Graf (2005), the degrees of operating and financial leverage are critical risk features of operations that define the risk profile of the cash flows generated from the assets. Following this line of reasoning, franchised and managed properties are likely to share more common risk characteristics than owned and leased operations as they exhibit much less leverage. As a consequence, hotel companies that produce more revenues from franchised or managed properties than from owned or leased operations are likely to benefit from more stable cash flows and thus exhibit less risk. In the present study, such firms would be characterized as having a high property ownership structure ratio (i.e. a high proportion of revenue generated from franchised or managed operations). Hence, the following hypotheses are formulated:

Hypothesis 2a: There is a significant negative relationship between the property ownership structure and the variation in stock returns of the U.S. multinational hotel industry; the higher the proportion of cash flows generated from franchised or managed operations, the lower the risk.

Hypothesis 2b: There is a significant negative relationship between the property ownership structure and the variation in stock returns of individual firms of the U.S. multinational hotel industry; the higher the proportion of cash flows generated from franchised or managed operations, the lower the risk.

In addition, the proportion of revenues from fee-based operations to the revenues from owned and leased units is also expected to influence their foreign exchange exposure. Indeed, firms with more foreign denominated cash flows generated from franchise agreements or management contracts are expected to endure less foreign exchange rate exposure than firms with more foreign denominated cash flows produced by owned or leased properties as they would be able to better hedge their foreign positions due to more steady and predictable cash flow streams. Therefore, it is hypothesized that:

Hypothesis 3a: The influence of the foreign exchange exposure on the variation in stock returns of the U.S. multinational hotel industry is moderated by the industry's property ownership structure; the lower the property ownership structure, the higher the foreign exchange exposure.

Hypothesis 3b: The influence of the foreign exchange exposure on the variation in stock returns of individual firms of the U.S. multinational hotel industry is moderated by the firms' property ownership structure; the lower the property ownership structure, the higher the foreign exchange exposure.

METHODOLOGY

The economic exposure to currency risk has been defined by the amount of variance in the firm or industry's value that is due to exchange rate changes (Adler & Dumas, 1984). According to prior studies, a firm or an industry's exposure can be estimated using a time-series regression such as:

$$R_{it} = \beta_{0i} + \beta_{1i} EXR_t + \varepsilon_{it}$$

Where R_{it} is the return on the i^{th} stock over the time period t , EXR_t is the change in exchange rate over the same period of time, β_{1i} is the exposure coefficient, β_{0i} is the intercept and ε_{it} is the random error term (El-Masry, 2006; Jorion, 1990).

The equation is often augmented to control for systematic movements in the stock returns, and often include a proxy for the market risk premium and consider the dependent variable as being the individual security's

risk premium as in the CAPM. Formally, the initial model used to test hypotheses 1a and 1b takes the following form:

$$RP_{it} = \beta_{0i} + \beta_{1i}EXR_t + \beta_{2i}RP_{mt} + \varepsilon_{it}$$

Where RP_{it} is the risk premium on the stock of firm or industry portfolio i over period t , RP_{mt} is the market portfolio risk premium over the period t , and β_{1i} and β_{2i} their respective regression coefficients. β_{0i} is the intercept and is expected to be zero.

Hypotheses 2a, 2b, 3a and 3b include the second unsystematic risk factor, the property ownership structure (POS), and are tested by adding two new terms to the model: the POS and the hypothesized interaction term of POS and EXR. The resulting augmented model becomes:

$$RP_{it} = \beta_{0i} + \beta_{1i}EXR_t + \beta_{2i}RP_{mt} + \beta_{3i}POS_{it} + \beta_{4i}EXR_tPOS_{it} + \varepsilon_{it}$$

Where POS_{it} is the property ownership structure of firm or industry portfolio i over the period t , EXR_tPOS_{it} is the moderating effect of POS of firm or industry portfolio i on EXR over the period t , and β_{3i} and β_{4i} their respective regression coefficients.

The models presented above state that the returns of asset i are a linear function of the simultaneous changes EXR, RP, POS and the moderator (POSxEXR). The assumption behind the simultaneity of the effect of each factor on the asset's returns is that of the efficient market. While some studies have tested the lag effect of exchange rates (e.g. El-Masry, 2006), their results have been inconclusive and the conceptual foundations of such lag effects have been weak. Indeed, as the information about exchange rate changes is widely available, it is unlikely that such change would not be immediately reflected in the market value of the firm.

The sampling framework used in this study includes all U.S. based multinational hotel companies that have been listed on a public stock market between January 1998 and December 2006. The initial sampling frame included firms classified as hotels or motels (SIC code 7011). From this initial list, only firms that had no missing data (e.g. delisted for a period of time) and more than five percent of their sales from foreign operations were retained (Jorion, 1990). In addition, firms that had had a status of REIT and that were not involved in the operation of hotel properties at some point during the sample window were excluded. The final sample was reduced to four firms which were deemed as truly representing multinational hotel companies.

Stock returns, market returns and the risk-free rate data were obtained from the Center for Research on Security Prices (CRSP) database. The market index used was the CRSP value-weighted market index. The risk-free rate was estimated by the 3-month Treasury bill. Stock and market returns were adjusted for dividends and splits. A total of 108 monthly observations were collected for these three variables. All returns were transformed into continuously compounded returns using the natural log function. For the exchange rate measure, monthly observations of the trade-weighted broad index published by the Federal Reserve Bank were collected. For consistency, this variable was also transformed using the natural log function. For the property ownership structure measure, quarterly data were collected from the companies' 10-Ks and 10-Qs. The POS ratio was obtained by dividing the revenues from franchise fees and management contract fees by the revenues generated from owned and leased hotel operations. The natural log transformation was also applied to the ratio. A total of 36 observations per firm were obtained. All regression models were estimated based on monthly observations. Quarterly POS ratios were used as monthly variables and assumed to operate as step functions (Wiseman & Catanach, 1997). The detection of two outliers and their replacement by average values as well as the log transformations documented above helped meet all of the required assumptions for time-series regression analysis.

EMPIRICAL RESULTS

The first set of equations developed aimed at testing hypotheses 1a and 1b. At this stage, the natural logs of EXR and RP were regressed against the returns of each individual firm and of the weighted portfolio. As illustrated in Table 1, hypothesis 1a was rejected and hypothesis 1b was only supported in the case of Starwood, which was the only firm with a significant exposure to foreign exchange risk. While these results are mostly disappointing, a potential explanation can be hypothesized. Indeed, as suggested by previous authors (e.g. Faff & Marshall, 2005),

the geographic locations of the trade partners probably have an influence on the degree of exposure. In the present study, the hotel companies included in the sample vary widely in terms of geographic implementation. As such, some firms may be more exposed to certain currencies but not to others. While consistent with prior studies, the single index which was used across firms may be an inefficient estimate.

Albeit mostly non-significant, it is interesting to note that the signs of the coefficients are all negative. This would suggest that a depreciation of the dollar relative to these foreign currencies is associated with higher returns. This is consistent with the view of the industry as being an export oriented industry as it (1) sells rooms in the US to either local or foreign tourists, and (2) repatriates foreign currency denominated sales from abroad.

In the second stage, the initial equation was augmented and included the POS ratio and the interaction term in order to test hypotheses 2a to 3b. The results presented in Table 2 show that the exchange rate exposure remained insignificant for the industry portfolio as well as for most of the individual firms. For Starwood, the exchange rate exposure was once more significant, but the sign of the coefficient had changed and became positive. This result would suggest that the exchange rate exposure of Starwood is a significant risk factor for investors and that geographic expansion of the firm adds risk to its shareholders. For the industry portfolio and other firms in the sample, the results confirm that the exchange risk exposure is not a significant source of risk.

Table 1
Industry and Firm Foreign Exchange Exposure

Firm / industry	Variable	Standardized coefficient	t-value	Adj. R-Square	DW
Weighted portfolio (REG)	RP	.484**	5.500	.212	2.061
	EXR	-.045	-.508		
Sonesta (REG)	RP	.202*	2.061	.026	1.998
	EXR	-.027	-.273		
Hilton Corp. (AREG)	RP	.391**	4.270	.145	2.194
	EXR	-.038	-.415		
Starwood (REG)	RP	.407**	4.426	.141	1.974
	EXR	-.323*	-2.008		
Marriott (AREG)	RP	.572**	6.933	.306	2.292
	EXR	-.040	-.480		

** indicates $p < .01$; * indicates $p < .05$

With regards to the other risk factors, it appears that the most significant remains the market portfolio and is thus systematic, with betas ranging from a low .214 for Sonesta to a high .765 for Marriott. The results also show that the property ownership structure, the firm-specific risk factor in the model, is highly significant for Hilton Corp. and Starwood, as well as at the portfolio level, providing some support to hypotheses 2a and 2b. The signs of these three coefficients are positive, indicating that a higher propensity to generate revenues from fee-based operations is associated with a higher risk for these two firms. While one would have expected these signs to be negative, the results suggest that, for some firms, fee-based earnings actually commend a higher risk premium.

A potential explanation for these unexpected results is that firms may follow certain strategies that investors perceive as risky. In the case of the property ownership structure, certain firms may be perceived as not having the necessary competences to operate fee-based operations. This lack of alignment between the strategic choices (i.e. growth through franchise or management contracts) and the firm's competences is then penalized by investors which require a higher rate of return to compensate for the misalignment.

Another explanation, still consistent with the notion of alignment, is that some fee-based contracts may be perceived as being more risky due to their intrinsic quality. Indeed, provisions in the contracts that favor the owner at the expense of the operator or franchisor could add significant risk. For instance, some provisions in franchise agreements may alleviate the ability of the franchisor to launch new products or services, or control its brand standards. Another reason explaining the differences between firms could be that earnings produced by short-term contract are less valued than those with longer term contracts.

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Table 2
Exchange Rate Exposure and Property Ownership Structure

Firm / industry	Variable	Standardized coefficient	t-value	Adj. R-Square	DW
Weighted portfolio (REG)	RP	.498**	5.680	.235	2.206
	EXR	.160	.888		
	POS	.194*	2.224		
	EXRxPOS	-.074	-.420		
Sonesta (REG)	RP	.214*	2.149	.016	2.019
	EXR	-.237	-1.008		
	POS	-.026	-.262		
	EXRxPOS	.237	1.000		
Hilton Corp. (AREG)	RP	.484**	5.424	.226	2.007
	EXR	-.014	-.052		
	POS	.239**	2.739		
	EXRxPOS	.067	.249		
Starwood (REG)	RP	.422**	4.675	.181	1.984
	EXR	.323*	2.103		
	POS	.188*	2.070		
	EXRxPOS	-.226	-1.160		
Marriott (AREG)	RP	.765**	8.256	.553	1.884
	EXR	-.452	-.784		
	POS	-.111	-1.129		
	EXRxPOS	.520	.893		

REG = OLS; AREG = Prais-Winsten Estimated GLS; ** indicates $p < .01$; * indicates $p < .05$

Another explanation, still consistent with the notion of alignment, is that some fee-based contracts may be perceived as being more risky due to their intrinsic quality. Indeed, provisions in the contracts that favor the owner at the expense of the operator or franchisor could add significant risk. For instance, some provisions in franchise agreements may alleviate the ability of the franchisor to launch new products or services, or control its brand standards. Another reason explaining the differences between firms could be that earnings produced by short-term contract are less valued than those with longer term contracts.

Finally, the results also show that the foreign exchange exposure is not significantly moderated by the property ownership structure as initially hypothesized (i.e. hypotheses 3a and 3b). This result was anticipated given that foreign exchange exposure does not appear to be a significant risk factor in itself.

SUMMARY AND CONCLUSIONS

The objectives of this paper were to test the relevance of two a priori influential unsystematic risk factors in the context of the U.S. multinational hotel industry: the foreign exchange exposure and the property ownership structure. This study empirically tested an augmented version of the CAPM. On the basis of the empirical results, it appears that the foreign exchange exposure is not a significant risk factor for the U.S. multinational hotel industry. In contrast, the results suggest that the pricing of multinational hotel companies' shares of stock would benefit from the addition of the property ownership structure ratio, which was found to be significant for a number of individual firms as well as for the industry portfolio. The inconsistencies observed for the signs of the coefficients showed that this firm-specific risk factor is perceived differently for each firm. The author of the present study hypothesizes that this difference in perception may be due to other firm-specific factors or characteristics that would be worth further research. Specifically, as the changes in property ownership structure are viewed as resulting from the most

dominant strategic choice in the industry, the author suggests that the internal alignment between this choice and the competences of the firm could determine the sign of the coefficient and shed additional light on the kind of unsystematic risks that are valued by investors.

Another valuable avenue for future research could be on the relationship between the property ownership structure coefficient signs and the risk profiles of the countries where the foreign operations are located. For instance, one could expect to see an expansion in a high-risk state be perceived as being more risky than an entry into a low-risk country independently from the chosen mode of entry.

Limitations

This study has been limited by the availability of time-series data; a larger sample as well as a qualitative evaluation of the property ownership structure variable would provide stronger evidence of the influence of this unsystematic risk factor on the firms' stock prices. Also, as noted earlier, the single index used to test the foreign exchange exposure might have been an inefficient estimate as the firms in the sample differed in terms of the geographic locations of their foreign operations. Building firm-specific indices that capture the actual geographic coverage of each firm could provide a more accurate measure of foreign exchange exposure.

Concluding thoughts

This study offered a small incremental step toward the identification of unsystematic risk factors that can enhance our ability to predict stock price changes. While the findings indicate that the property ownership structure variable is a valuable risk factor, the rather marginal adjusted R-squares obtained further emphasize the need to improve upon our current practices and to further develop industry-specific asset pricing models.

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**HRM PRACTICES AND ORGANIZATIONAL COMMITMENT: EXAMINING MEDIATING EFFECTS
OF PERCEIVED ORGANIZATIONAL SUPPORT**

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ABSTRACT

The purpose of this study was to investigate the impact of a bundle of eight human resource management (HRM) practices on organizational commitment (OC) and perceived organizational support (POS), and to examine the mediating effect of POS on the relationship between the HRM practices and OC. Data were collected from employees in a service organization in India. The results showed that working conditions and information sharing had significant impacts on POS, and performance appraisal significantly increased employees' commitment. It was found that POS indeed had a mediating effect on the relationship between HRM practices and OC.

Key Words: perceived organizational support, organizational commitment, human resource practices

INTRODUCTION

Human resource researchers have long devoted time to determining how employees develop commitment to an organization as an employer because researchers have believed that employees' commitment is one of the most important and strongest predictors of turnover (e.g. Griffeth & Hom, 1995; Igharia & Greenhaus, 1992; Allen & Meyer, 1990). Some have sought antecedents of OC in HRM practices (Meyer & Smith, 2000); some have attempted to find predictors in perceived organizational support (Eisenberger, Huntington, Hutchison & Sowa, 1986; Eisenberger, Fasolo, & LaMastro, 1990); and some have recently found that language similarity could affect commitment through perceived organizational support (Potts & Reynolds).

Although considerable research has been conducted to discover the impacts of HRM on organizational performance (e.g. Huselid, 1995; Cho, Woods, Jang, & Erdem, 2006), effects of HRM practices on employees' commitment have received little attention despite the potential direct influence they may have on employee attitude. This present study attempts to explore the potential impacts of HRM practices on employees' commitment. Few empirical studies have suggested a positive linkage between HRM practices and commitment. According to Levinson (1965), employees view the behavior and actions of organizational agents as the actions of the organization itself. Eisenberger et al. (1990) argued that when employees believed that an organization was committed to its HRM programs, they believed that the organization was committed to them. Employees' positive attitudes towards the company contribute to the development of employee commitment to the organization (Kinicki et al. 1992). Meyer and Smith (2000) empirically showed that career development had a direct impact on affective commitment; Gaertner and Nollen (1992) found that internal promotion, training opportunity, and employment security were related to commitment.

Although several studies have suggested the positive direct relationship between HRM practices and OC, others argued that the linkage may not be direct. For example, Meyer and Smith (2000) found that the impact of career development and benefits on commitment was mediated through perceived organizational support (POS). As Eisenberger et al. (1990) argued, when employees perceive that their organizations are committed to their development and well being, employees form strong commitment to the organization. In other words, employees' perceived organizational support may have a stronger influence on commitment than HRM practices.

Therefore, this present research provides an empirical analysis of the interrelationship of HRM practices, POS and OC. In particular, we investigate the linkage between HRM practices and OC, mediated by POS. The rationale for this proposition is provided through a discussion of social exchange theory which explains the

mechanism of the complex interrelationship of HRM practices, POS and OC. In addition, we discuss previous studies on HRM practices and commitment, followed by a discussion of how organizational support mediates the linkage between HRM practices and commitment.

LITERATURE REVIEW

Social Exchange Theory

This important effect of commitment has been explained in the light of social exchange theory (Blau, 1964; Gouldner, 1960). Social exchange is defined as cooperation between two or more parties for mutual benefit (Robinson, 1996). Researchers have increasingly adopted social exchange as a theoretical foundation for understanding employee-employer relationships (Coyle-Shapiro & Conway, 2005). According to Blau (1964), social exchanges involve unspecified obligations, in which an individual does a favor for an expectation of some future return, although the timing and form of the return is often unclear. A social exchange is based on undeclared obligations and trust (Tansky & Cohen, 2001). Social exchanges may also involve reciprocity which has been defined as the norm which obligates the recipient of benefit to repay the donor in some way (Gouldner, 1960). Therefore, the employee-employer relationship may be viewed as a social exchange. An employer may acknowledge an employee's efforts by offering opportunities and benefits, and in return for these opportunities and benefits, employees may feel obligated to reciprocate and may become more committed to the organization (Tansky & Cohen, 2001). Eisenberger et al. (1986) used a social exchange framework to argue that employees who perceive a high level of support from their organizations tend to feel obligated to the organization which in turn increases their commitment to the organization.

HRM practices and Organizational Commitment

Although there are several different conceptualizations and measures of OC research, as well as several different definitions of OC, these various definitions and measures share the common theme of a psychological attachment to an organization, translating to a psychological bond linking individuals and their organizations (O'Reilly & Chatman, 1986). According to Mowday et al., (1982), employees who are committed to an organization (1) believe in the goals and values of the organization, (2) work hard for the organization, and (3) intend to stay with the organization. Thus, organizational commitment not only enhances employee intentions to exert effort on behalf of an organization but also influence employees' intentions to stay with the organization.

HRM practices and policies have been suggested as factors which increase OC among employees (Meyer & Smith, 2000; Arthur, 1994). Based on social exchange theory, Ogilvie (1986) proposed that when employees perceive that an organization cares about their welfare and recognizes their contributions, that perception can form a belief that the organization will provide a variety of tangible rewards in exchange of their efforts and commitment. Hence HRM practices are proposed as a practical approach to develop OC (Arthur, 1994). For example, OC was found to have a significant positive relationship with training (Bartlett, 2001), salary levels (Ritzer & Trice, 1969), performance-reward contingencies (Rhodes & Steers, 1981), promotion (Kanter, 1977) and profit sharing (Coyle-Shapiro, et al, 2002).

However, most of the research in this area has concentrated on individual HRM practices. Wilkinson, et al. (1996) argued that specific styles of HRM are not appropriate in all circumstances. Ogilvie (1986) suggested that commitment levels could not be changed by a single HRM practice such as a training program or a new benefit program. HRM practices can best influence commitment levels when they are a part of a systematic program (Arthur, 1994). HRM practices affect organization performance greater when they are integrated and implemented together (Pathak, et al., 2005). Chang (2005) argued that commitment enhancing HRM practices send messages to employees about the organization's commitment to them, which in turn makes the employees more committed to the organization. Therefore, we included eight HRM practices found in previous studies that effect turnover intention, commitment, and perceived organizational support. The following hypothesis is proposed:

H-1: HRM practices will be positively related to organizational commitment.

HRM Practices and Perceived Organizational Support

MacDuffie (1995) argued that the bundling of commitment enhancing HRM practices would significantly enhance employees' perceptions of HRM practice effectiveness. According to Chang (2005), the overall perception of employees may be an important factor in understanding employees' behavior at the workplace because they are exposed to a range of HRM practices rather than to a single practice. Levinson (1965) argued that employees tend to

view the behavior and actions of organizational agents as actions of the organization itself. Eisenberger et al. (1990) found that employee beliefs that the organization was committed to its human resource programs made them more committed to their organization. Recent empirical research has established a positive relationship between HRM practices (training, developmental experiences and promotion) and POS, suggesting that employees consider HRM practices as a means by which organizations display commitment to employees (Wayne, et al., 1997). In spite of this evidence of the significant impact of HRM practices on POS, this relationship has not been studied in detail. Along with developmental experiences and organizational recognition, the influence of other HRM practices (staffing, information sharing, working conditions, equal employment opportunity, etc.) should also be examined. Thus, the following hypothesis is proposed:

H-2: HRM practices will be positively related to POS.

Perceived Organizational Support and Organizational Commitment

Perceived organizational support (POS) refers to employees' perceptions of their organization's commitment to them (Eisenberger et al., 1986). Eisenberger et al. (1986, p501) proposed that "*employees develop global beliefs concerning the extent to which the organization values their contributions and cares about their well being.*" Eisenberger et al. (1990) used a social exchange framework to argue that employees who perceive a high level of support from an organization tend to feel obligated to the organization, and therefore return the favor with higher OC. Thus employees tend to seek a balance in their exchange relationships with their organizations, by forming their attitudes and behavior based on how much their employers are committed them (Eisenberger et al., 1990). Therefore, the literature provides considerable support for the positive link between POS and OC (Eisenberger et al., 1986; 1990; Shore & Wayne, 1993). The following hypothesis is therefore proposed:

H-3: POS will be positively related to organizational commitment.

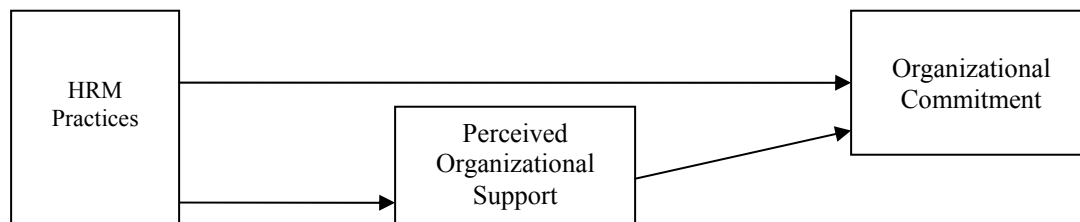
Mediating Effects of POS on the relationship between HRM and OC

Although previous studies have suggested that HRM practices are related to OC, some scholars have found that these relations are not necessarily direct (Meyer & Smith, 2000). Kinicki et al., (1992) found that the relationship between HRM practices and work attitudes was mediated by employee perceptions of an organization's commitment to its human resource practices that benefit employees. Based on these prior findings Meyer and Smith (2000) suggested that the assumption of a direct influence on the implementation of a particular HRM practice on employees' OC cannot be made. Instead, the implementation of a particular HRM practice may cause employees to consider the actual motive of the organization. Thus employee perceptions about the motive of the organization may have a direct influence on their commitment level (Meyer & Smith, 2000). Hence, commitment may be influenced more by the message that HRM practices send to employees than by HRM practices themselves (Guzzo & Noonan, 1994). Thus, according to the literature, employee perception that an organization is committed to them through their HRM practices may result in an increase in POS. An increase in POS can cause employees to feel obligated to might return the favor in terms of higher OC indicating HRM-POS-OC linkage. Therefore, the following hypothesis is proposed:

H-4: POS will mediate the relationship between HRM practices and OC.

In an effort to study the relationships which support the hypotheses developed in the literature review, a conceptual model was developed as shown in Figure. 1.

Figure 1
Conceptual Model



METHODOLOGY

Sample and data collection

The sample frame for this study consisted of employees in a service company in India. The primary responsibilities of the employees included answering customer inquiries, responding to customers' problems, and selling and recommending services over the phone. All employees working in the organization were asked to participate in the survey, which included staff, supervisors, project leaders and managers. An internet survey questionnaire was sent by email to 183 employees. Over a span of three weeks, a total of 131 employees responded, yielding a response rate of 72%.

Measures

Commitment was measured with 17 items ($\alpha = .70$). A 16-item measurement scale, developed by Allen and Meyer (1990) was adopted. Of the sixteen items in the original OC measurements, one item was a double barrelled question. Hence, this item was split into two separate items to reduce measurement error. Therefore, 17 items were used to measure OC in this study. By way of example, one item in this survey was, "I would be very happy to spend the rest of my career with this company." Perceived organizational support was measured with seven items from the scale developed by Eisenberger et al. (1986). Cronbach's alpha was .94, indicating satisfactory level of reliability. One sample question of POS measures is, "my employer cares about my well-being." HRM practices were measured with a 42-item scale consisting of statements regarding eight HRM practices. Edgar and Geare's (2005) 20 item scale was adapted to measure staffing, training, equal employment opportunity and working conditions. All four constructs consisted of five items per construct, and the reliability level was .69, .82, .78, and .75 respectively. Three items for performance appraisals were obtained from Chang's (2005) and the reliability was .79. Information sharing was measured with six items obtained from a study by Kinicki, et al. (1992) and the reliability was .86. Rewards were measured with seven items ($\alpha = .91$), six items from Balkin and Gomez-Mejia's (1990) study and one item from Chang and Chen (2002). With regard to benefits, five items were obtained from Lucero and Allen's (1994) and the reliability was .71. Therefore, the reliability scores are in the range of .69-.94; although the reliability scores are not very high but fulfils the minimum requirement.

Data Analysis

Multiple regression analyses were used to examine hypothesis 1, 2, and 3. The mediating effect of POS on the relationship between HRM practices and OC was examined with four stages as suggested by Baron and Kenny (1986). Index score for the eight HRM practices was used to test the mediating effect of POS on the relationship between HRM practices and OC. The index score was computed by averaging the eight HRM practices.

RESULTS

Demographic profiles of participants

The majority of respondents were male (58.25%). The average age of the subjects was 28.71. Nearly 50% ($n = 45$) of the employees worked as staff, supervisors and managers. With regard to the number of job quits in the last five years, it was found that 41.8% of employees had never changed jobs. Among respondents, 24.2% had worked for their current employer one to two years ($n = 22$). This was followed by employees who had worked for their current employer for more than four years ($n = 21$; 23.1%). 51.6% of the employees reported to have earned a Bachelor's degree ($n = 47$), and 28.6% reported to have earned a Master's degree ($n = 26$).

Hypotheses Testing

A simultaneous multiple linear regression analysis was conducted to examine hypothesis 1. As Table 2 shows, the model included eight HRM practices. The linear combination of the HRM practices explained about 25% of the variance of OC, $F_{(8, 97)} = 4.95$; $p < .05$. The correlation matrix indicates a positive relationship between all HRM practices and OC. Therefore, results provide evidence of the relationship between HRM practices and OC, supporting hypothesis one. However, of eight HRM practices, only performance appraisal emerged as a significant predictor of OC ($b = .23$, $t = 2.31$; $p < .05$). It was proposed that HRM practices would have positive relationships with POS in hypothesis 2. As shown in Table 1, the linear combination of HRM practices explained approximately 51% of the variance in POS, $F_{(8, 97)} = 13.52$; $p < .05$, and correlation matrix indicated a positive relationship between all HRM practices and POS. Therefore, hypothesis 2 was supported. Of eight HRM practices, information sharing ($b = .34$, $p < .05$), and working conditions ($b = .33$, $p < .05$) were found to significantly predict employees' POS.

Table 1
Correlation Matrix

	T	PA	S	R	B	WC	EE	IS	OC	POS
T	1.00									
PA	.78*	1.00								
S	.67*	.74*	1.00							
R	.57*	.71*	.76*	1.00						
B	.55*	.67*	.69*	.75*	1.00					
WC	.65*	.66*	.66*	.59*	.67*	1.00				
EE	.68*	.69*	.67*	.62*	.67*	.86*	1.00			
IS	.78*	.81*	.73*	.68*	.68*	.69*	.75*	1.00		
OC	.41*	.51*	.45*	.33*	.32*	.39*	.39*	.49*	1.00	
POS	.66*	.61*	.62*	.48*	.46*	.60*	.56*	.68*	.47*	1.00

Note: T = Training; PA= Performance Appraisal; S = Staffing; R = Rewards; B = Benefits; WC = Working Conditions; EE = Equal Employment Opportunity; IS = Information Sharing; OC = Organizational Commitment; POS = Perceived Organizational Support.

All variables were measured on a 7-point scale, 1= strongly disagree, 7 = strongly agree.

* $p < .05$

Hypothesis 3 suggests that POS would affect employees' commitment. Results of a regression analysis supported the proposed relationship. The results indicate that POS explained approximately 21% of the variance in OC ($F_{(1, 130)} = 35.71; p < .05$), and it was found that the regression coefficient of POS was significant ($b = .28, p < .05$).

Table 2
Results of Simultaneous Regression Analysis of HRM practices on OC and POS

	OC			POS		
Variable	b	t	p-value	b	t	p-value
Constant	2.76	8.89	.01	1.24	3.01	.01
HRM practices						
Training	-.07	-.76	.45	.21	1.78	.07
Performance Appraisal	.23	2.31	.02	.02	.15	.88
Staffing	.13	1.40	.16	.22	1.79	.07
Rewards	-.09	-1.05	.29	-.05	-.42	.67
Benefits	-.08	-.85	.40	-.16	-1.18	.24
Working condition	.04	.36	.72	.33	2.12	.03
EEO	-.01	-.04	.97	-.16	-1.02	.30
Information sharing	.14	1.35	.18	.34	2.41	.01
R = .56				R = .74		
R ² = .31				R ² = .55		
Adjusted R ² = .25				Adjusted R ² = .51		
F = 4.95*				F = 13.52*		

Note: All variables were measured on a 7-point scale, 1= strongly disagree, 7 = strongly agree.

The results of the mediating analysis are presented in Table 3. First, to examine the relationship between the predictor (HRM practices) and the criterion (OC) variables, a simultaneous linear regression analysis was conducted. It was found that 22% of the variance in OC was predicted by HRM practices, and the regression coefficient of HRM practices was significant ($b = .33, p < .05$). Second, a simultaneous linear regression analysis was conducted to examine the relationship between predictor (HRM practices) and mediator variables (POS). It was

found that 46% of the variance in POS was predicted by HRM practices and that HRM practices significantly predicted POS ($b = .77, p < .05$). Third to examine the relationship between the mediator (POS) and the criterion variables (OC), another simultaneous linear regression analysis was conducted. It was found that 22% of the variance in OC was predicted by POS, and that the regression coefficient of POS was significant ($b = .28, p < .05$). As suggested by Baron and Kenny (1986) all of the relationships were significant. Fourth, to examine the relationship between the predictor (HRM practices) and the criterion variables (OC), after controlling the relation between the mediator (POS) and the criterion variables (OC), a hierarchical linear regression analysis was conducted. It was found that HRM practices became insignificant after POS was controlled ($b = .13, p > .05$). The results indicated that POS had a significant complete mediating effect on the relationship between HRM practices and OC. Therefore, hypothesis 4, which states that POS will mediate the relationship between HRM practices and OC, was supported.

Table 3
Results of the Mediating Effect of POS on HRM practices and OC

Variables	Stage 1	Stage 2	Stage 3	Stage 4
	OC	POS	OC	OC
	b	b	b	B
Constant	2.68*	1.39*	2.80*	2.32*
HRM practices	.33*	.77*		.13
POS			.28*	.25*
R ²	.23	.46	.22	.32
F-value	28.09*	81.93*	35.71*	22.61*

Note: All variables were measured on a 7-point scale, 1 = strongly disagree, 7 = strongly agree.

* $p \leq .05$

DISCUSSIONS

This study finds that HRM practices affect employees' commitment through perceived organizational support, rather than by having a direct effect on commitment. This finding is somewhat consistent with the findings of Meyer and Smith (2000). This result implies that HRM practices provided by an employer make employees to consider the motive of the organization (Meyer & Smith, 2000) and make employees to perceive that their organization is committed to their development and well-being. This perception, which is often referred to as "perceived organizational support," is indeed the direct predictor of employees' commitment. Hence, commitment may be influenced more greatly by the message that HRM practices send to employees than by the HRM practices themselves (Guzzo & Noonan, 1994). The unique HRM-POS-OC linkage suggests that when employees believe that their organization is displaying its commitment to them and is using HRM practices for employees' wellbeing; employees perceive the HRM practices as support from the organization, which translates to greater commitment to the organization.

This study attempts to find the impact of a bundle of eight HRM practices on POS. The findings would be more important for academicians and practitioners because an organization practices several diverse HRM practices, not a single HRM practice alone. The findings provide an opportunity to consider which practices are more effective than others. Therefore, an organization can emphasize those HRM practices which have a strong influence on perceived organizational support and commitment. Of eight HRM practices, working conditions and information sharing had significant influences on perceived organizational support (POS). This finding is different than the conclusions of Meyer and Smith in 2000. The Meyer and Smith study showed that benefits and career development had an effect on POS which had a positive effect on affective commitment. We hypothesize two reasons for this discrepancy. First, the study involved a different sample. Second, the study included a different set of HRM practices. We have collected data from employees working in a service company in India, while Meyer and Smith (2000)'s study involved employees in Canada. The scarcity of literature on cultural differences of Indian employees presented difficulties in explaining the different results. It may be possible to understand the positive relationship between information sharing and perceived organizational support by examining hierarchy culture. Kakar and Kakar (2007, cited in Sharma, 2007, p.71) described "Indian CEO's to be the highest in power distance and humane orientation compared to other societies." To a greater extent than western employees, Indian employees may be

more committed to an organization when their employer is willing to listen to suggestions and shows that their opinions are valued.

Working conditions may be a more important factor in India than in other developed countries. This may be especially true for example, among employees working in a call center or among employees with a difficult work schedule. Customers usually call a call center when they have problems with their cell phone, computer, etc. Thus, by the time they make a phone call to a customer service agent, they are already frustrated with problems (Sandberg, 2007). These factors make working in a call center industry in India more difficult. In this environment, workers may more appreciate employer's commitment to improve the working conditions.

Another possible explanation for different results could be that a different set of HRM practices was studied. Meyer and Smith's study (2000) included only four HRM practices: benefits, training, career development, and performance appraisal. This implies a very important point for HRM researchers. HRM researchers must make a greater effort to reach a consensus as to which HRM practices should be included to test the impact on employees' attitude. More future studies should be conducted to investigate which HRM practices are more effective to increase organizational commitment among workers in India.

LIMITATIONS

Although this study made several contributions to HRM research and the service industry, it has several limitations. First, a small sample size hinders the generalizability although the sample size in this study meets the minimum requirement for regression analysis. In addition, data was collected only from one service organization in India, and may not be representative of the population, therefore limiting generalizability. This provides scope for future studies to conduct random sampling and conduct research involving different subjects, in different geographic locations and at different times to deal with external validity issues (Kerlinger & Lee, 2002).

Second, in this study, to test the mediating effect of POS on the relationship between HRM practices and OC, eight HRM practices were combined to produce an index score for the HRM variables. In future studies, it would be meaningful to discover which HRM practices emerge as significant predictors when the mediating effect of POS is tested on the relationship between HRM practices and OC. For this purpose, a structural equation modelling would be preferred. This could not be applied in the present study due to the small sample size. Finally, the study was non experimental, so even though the findings are consistent with the hypotheses, any firm conclusion about the direction of causality cannot be made (Kerlinger & Lee, 2002).

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**RATIONAL CHOICE THEORY IN COLLEGE RECRUITING: A CONCEPTUAL FRAMEWORK FOR
AN INVESTIGATION INTO THE CHOICE BEHAVIORS OF HOSPITALITY ORGANIZATIONS,
RECRUITERS, AND GRADUATING SENIORS**

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ABSTRACT

This conceptual paper uses rational choice theory to investigate the decision making process of hospitality organizations/recruiters and seniors in college recruiting. A model entitled Rational Choice Model in College Recruiting (RCMCR) is proposed to answer two research questions about what factors impact hospitality graduating seniors' decisions to interview and accept job offers and what criteria hospitality organizations/recruiters use in selecting hospitality graduating seniors. Seven research propositions are advanced for future studies. Practical and research implications of the model are discussed.

Key Words: Rational Choice Theory, college recruiting, hospitality

INTRODUCTION

Hospitality organizations spend large amounts of time and money recruiting college graduates for entry-level management positions (Tepeci & Wides, 2002). Today, recruiting and hiring a new college graduate can cost as much as \$5,417 (National Association of Scholars, 2006). This creates a desire in recruiters to find effective means of attracting and hiring graduating seniors for the hospitality industry. By understanding hospitality students' job choice behavior, recruiters can develop strategies to effectively market their organizations and career opportunities for graduating seniors. In some segments of the hospitality industry, managerial turnover rates can be as high as 129% (Carbery, Garavan, O'Brien, & McDonnell, 2003), and the estimated cost for such turnover can be up to \$50,000 per manager (Cho, Woods, Jang, & Erdem, 2006). Hospitality organizations and recruiters are very selective when making job offers, and hospitality seniors often discover that the competition for jobs can be intense.

During the hiring process, there is a two-way interaction between how an organization attracts and hires graduating seniors and how these seniors make their job choices. Several studies have shown that prospective management candidates use influential tactics to affect recruiters' impressions about them and thus affect recruiters' hiring decisions (e.g. Higgins & Judge, 2004; McFarland, Ryan, & Kriska, 2002; Silvester, Anderson-Gough, Anderson, & Mohamed, 2002). These tactics can range from knowledge, skills, and talents to personality characteristics, values, and social skills. Research that examines and attempts to understand this interaction would be important to hospitality organizations, educators, and students.

During the 1990s, hospitality researchers started to pay long-needed attention to the area of recruitment (Guerrier & Deery, 1998). However, many recruitment studies were not grounded in theory (Breaugh & Starke, 2000). Guerrier and Deery (1998) reviewed 156 books and articles on organizational behavior and human resource (HR) management in the hospitality industry. They found that the issue of recruitment and selection had been integrated into the discussion of HR best practices in the UK and Australia, while North America concentrated on recruiting and selecting the candidates who best "fit" an organization. Lucas and Deery (2004) reviewed over 100 HR management papers in leading hospitality journals during 2002 and 2003 and identified only five articles regarding recruitment and/or selection. These articles had a best practice focus and lacked any theoretical framework. This type of article has been categorized as dispositional research and criticized for not having a theoretical framework (Wright & Boswell, 2002). Scholars have urged researchers to apply relevant theoretical concepts to future studies (Breaugh & Starke, 2000; Wright & Boswell, 2002). This paper will discuss how rational

choice theory can be used to help explain the interaction and influential efforts of hospitality organizations/recruiters and students during college recruiting.

Rational choice theory has been widely used in many disciplines to analyze people's private, corporate business, government, and professional decisions (Brown, 2005). The theory's premise is that individuals and groups act in their best interest and make choices which accomplish their objectives (Green, 2002). Choices are intentionally and deliberately made from alternatives based on anticipated outcomes. The interactions of purchasers and sellers are an example of how rational choice theory works. Rational choice theory has also been applied as a "theoretical framework" by social scientists to help people understand human behavior (Hechter & Kanazawa, 1997; Chapman, 2003). The predictive power of rational choice theory has been proven in the transportation, tourism, and leisure segments of the hospitality industry (Louviere, Street, & Burgess, 2004).

LITERATURE REVIEW

Rational choice theory is a dominant paradigm in economics (Green, 2002). It applies the ideas of cognitive psychology to the problems in economics (Lunt, 2006). According to Green (2002), rational choice theory contains five basic elements. First, it begins with the premise that an agent (or agents) is choosing a preferred alternative which is also known as the "utility function." Second, the choice process is presented with constraints, making choice necessary and the trade-offs between alternative choices very explicit. Every agent is trying to make a "utility-maximizing choice." Third, it is assumed that the choices are made within a certain environment or market. Fourth, rational choice theorists assume that the choices of different agents are consistent and equilibrium of circumstances exists. Lastly, rational choice theory states that equilibrium outcomes in the model are adequate representations of what actually happens in the real world.

This description of the theory fails to consider the unknown factors that agents often have to deal with in making decisions, and the theory has been extended in numerous ways to account for these variables. According to Green (2002), the extensions of the classic rational choice model are achieved by adding new components to the model. For example, while the classic model accounts for choices at a given time, a dynamic model also considers an agent's future plans, allowing an agent to plan for the future as well as make choices in the present. Another extension involves explicit treatment of uncertainty. This extended model allows for uncertainty by assuming the agent maximizes expected utility. A third extension of the basic model contains incomplete information. This allows an agent to make choices when he/she does not have all the information. Last, the basic rational choice model is extended by adding strategic behavior, where an agent's choice decision relies on strategic planning. These extended rational choice models can describe the choice behavior during the college recruiting process. Upon graduation, seniors may not be aware of all the details about job offers from hospitality organizations, and they feel uncertain about their future; but they have to make a job choice. Similarly, recruiters make job offers to graduating seniors by screening their resumes, conducting interviews, and evaluating assessment tests. Despite this detailed screening of college seniors, recruiters are often not aware of everything they need to know about the seniors they choose. There is no guarantee that new hires will be successful in their new positions.

Recruitment is the process of "encompass(ing) all organizational practices and decisions that affect either the number, or types, of individuals who are willing to apply for, or to accept, a given vacancy" (Rynes, 1991, p. 429). It is one of the major components of HR management for an organization. Employee recruitment involves organizational activities that (1) influence the number and/or types of applicants who apply for a position and/or (2) affect whether a job offer is accepted (Breaugh, 1992). The decision or choice process occurs when organizations/recruiters attract and hire applicants and when applicants make decisions about interviewing and accepting job offers. Rational choice theory provides another means to study the choice preferences of organizations, recruiters, and applicants.

Despite the fact that organizations and recruiters are the decision makers in attracting applicants, people know little about organizations as "actors" in recruitment (Barber, 1998). Breaugh and Starke (2000) conducted a narrative review of recruitment and found that no study has addressed the issues of how organizations or recruiters attract job applicants' attention and interest. According to their review, studies of recruiters often focus on (1) the impact of recruiter's "informativeness" and "personableness," (2) the relationship between applicants' perceptions of recruiters' behavior and applicants' reactions to the recruitment process, (3) effects of recruiters' demographic background, and (4) other characteristics of the recruiters that would affect applicants' perceptions. Even in the

a job offer. At the same time, hospitality seniors influence hospitality organizations'/recruiters' decisions about second interviews, job offers, and whether different recruiting tactics should be used. Third party agents' opinions can also moderate these influential relationships. These third party agents could be an acquaintance, friend, relative, faculty member, or staff person in a university's career and placement center. Both hospitality organizations/recruiters and graduating seniors are trying to make the best choice ("utility-maximizing choice") with the information at hand. All the processes in this model happen within the environment of the hospitality industry. The propositions raised by the model are listed as "P_n," where "P" stands for proposition and "n" is the numerical order of the propositions.

Organizations/recruiters influence graduating seniors' job choices through organizational characteristics, job characteristics, recruiters' characteristics, and recruiting activities. Organizational characteristics consist of the company's image, size, work environment, history, resources, etc. (Chapman, et al., 2005; Ryan & Ployhart, 2000). Barber (1998) discussed organizational attractiveness under the expectancy model of job choice, stating that organizational characteristics are big factors in this attractiveness. Chapman et al. (2005) found in their meta-analyses of 71 previous studies that perceived work environment and organizational image has a very strong relationship with organizational attractiveness. A hospitality study by Tepeci and Wildes (2002) also indicated that organizational characteristics such as support of employees' success from organizations and positive work environment attract job applicants. These results suggested that certain organizational characteristics have an important impact on job applicants' attraction to organizations. Job applicants' attraction and intention are related to their actual job choices (Chapman et al., 2005). This leads to the following proposition:

Proposition 1: Organizational characteristics that include a good work environment, positive organizational image, and organizational support are positively related to hospitality graduating seniors' choice of interviewing and accepting a job.

Job characteristics include interesting work, benefits, variety in job tasks, job security, working conditions, salary, responsibility, relocations required by the job, opportunity to use one's ideas, opportunity for creativity, travel required by the job, status of the position, etc. (Laker & Gregory, 1989). Many empirical studies have shown that job attributes have a significant effect on applicant attraction (e.g. Rynes, Bretz, & Gerhart, 1991; Turban, Forret, & Hendrickson, 1998). Thomas and Wise (1999) found in their study of MBA students that "job characteristics are perceived as highly important to organizational attraction" (p. 386). A hospitality study by Tepeci and Wildes (2002) suggested that "career development/appreciation," "quality of life/support for success," and "fair compensation/job security" are the top three factors for attracting hospitality students. In a narrative review of employment interview research published after 1989, Jelf (1999) suggested that perceptions of job attraction are strongly related to the likelihood of taking a job offer. Thus, the following is proposed:

Proposition 2: Job characteristics, such as career development/appreciation, quality of life/support for success, and fair compensation/job security are positively related to hospitality graduating seniors' decisions to interview and accept a job offer.

Recruiters are one of the main sources of information about organizations and jobs for students (Rynes & Boudreau, 1986). They represent the organizations by planning and participating in various kinds of recruiting activities to attract and choose graduating seniors. A recruiter is often the first person a hospitality senior encounters from an organization. As a result, hospitality seniors often perceive a recruiter as a symbol of the organization. Several recent meta-analytic and narrative reviews found that recruiters' demographic variables are not significant or only have limited impact on predicting the attractiveness of an organization and job, but recruiters' behavior does have a large influence on job applicants. Chapman et al., (2005) concluded in their meta-analysis that recruiters' demographic variables are not related to job-organization attraction. Jelf (1999) suggested that there is limited support for demographic and recruiter-applicant similarity effects. He concluded that the interviewer's behavior can influence job applicants' behavior, stating that recruiters with "cold" personalities elicit overall poorer responses compared to those with "warm" personalities. Posthuma, Morgeson, and Campion (2002) found in their review of 278 studies on employment interviews the following evidence: (1) laboratory studies suggest that both recruiter friendliness and job attributes affected job applicants' reactions; (2) a multifaceted measure of recruiters' behavior during job interviews is moderately related to the likelihood of taking a job offer. In brief, "researchers have theorized about the positive effects of recruiters who are informative, credible, personable, and demographically diverse" (Breaugh & Starke, 2000, p. 414). This evidence leads to the following proposition:

Proposition 3: A recruiter's personality (being friendly and informative) has a stronger positive relationship with hospitality graduating seniors' decisions to interview and accept a job offer than does a recruiter's demographic characteristics or recruiter-applicant similarity effects.

Hospitality organizations/recruiters use a variety of recruiting activities to attract students' attention and interest. These activities include receptions, presentations, career fairs, interviews, site visits to the host organization, and other recruiting functions. Organizations/recruiters encourage managerial candidates to participate in these activities, and they utilize these opportunities to become acquainted with candidates and to evaluate these candidates' potential for success within the organization. Sciarini & Woods (1997) studied 550 students of 19 U.S. hospitality programs and found that certain recruiting activities, such as job fairs and company-sponsored tours, have more impact on students' impressions than other activities. Cho, Woods, and Sciarini (2006) conducted a follow up study and found that organization sponsored events, such as social events, seminars/educational programs, open houses, scholarships, and tours of properties/stores/accounts are positively related to the hospitality students' interest in working for in quick-service restaurants and country clubs. Several other studies have shown that these activities are effective (Powell & Goulet, 1996; Rynes, Bretz, & Gerhart, 1991; Turban, 2001), suggesting the next proposition:

Proposition 4: The extent of involvement of hospitality organizations/recruiters in recruiting activities is related to hospitality graduating seniors' decisions to interview and accept a job offer.

While hospitality graduating seniors are forming their job choices, hospitality organizations and recruiters are assessing the characteristics of these seniors through interviews, assessment tests, and other interactions. Hospitality graduating seniors' characteristics include their appearance, demographic information, relevant work experience, interview skills, and personality (Posthuma, Morgeson, & Campion, 2002). These characteristics influence hospitality organizations'/recruiters' decisions as to which graduates will be selected. Based on the results of the overall college recruiting experience, hospitality organization/recruiters will also evaluate the recruiting experience and decide what future strategies to use. Jelf (1999) found in several studies that job applicants' nonverbal behavior, physical attractiveness, scent, and dress during interviews can influence interviewers' hiring decisions. He also reported evidence that job applicants' work experience and academic qualifications affect recruiters' hiring decisions and that recruiter-applicant similarity effects are not significant in terms of age or race when applicants are White. Posthuma, Morgeson, and Campion (2002) reviewed 278 studies and emphasized that: (1) applicants' appearance in interviews is related to recruiters' evaluations; (2) studies show small and inconsistent effects for job applicants' demographic characteristics; and (3) applicants' three personality characteristics of extraversion, conscientiousness, and need for achievement are modestly related to interview outcomes. Thus, the following proposition can be drawn:

Proposition 5: Hospitality seniors' appearance during interviews and certain personality traits are related to hospitality organizations'/recruiters' hiring decisions.

Another component of the RCMCR comprises the opinions of third party agents. These agents share information with either the organizations/recruiters and/or graduating seniors. These agents are outsiders involved in the public relations aspect of recruitment (Barber, 1998). Sciarini and Woods (1997) found that word of mouth from faculty members, alumni, and other students greatly influence a student's perceptions about a hospitality company. Cho, Woods, and Sciarini (2006) found that "word of mouth and experience as a customer" impact a hospitality student's job choice decisions concerning economy hotels and quick-service restaurants. Engelland, Workman, and Singh (2000) stated that a high-quality career services center in an institution can better "market" students and assist them in entering the workforce. These third party agents can moderate the decision-making process of both hospitality seniors and recruiters, which suggests the following proposition:

Proposition 6: The opinions of third party agents moderate the influential relationship between hospitality organizations/recruiters and hospitality graduating seniors.

The interactions of the agents in the RCMCR occur within the environment of the hospitality industry, and this environment affects the decisions of hospitality organizations/recruiters and hospitality graduating seniors. The growth of the economy in the U.S. during the 1990s led to a tight labor market and increased the importance of recruitment in the competition for skilled individuals (Collins & Stevens, 2002). Many hospitality companies have responded by spending great amounts of time, effort, and money to recruit, develop, nurture, and retain employees (Singh, Hu, & Roehl, 2007; Cho, Woods, Jang, & Erdem, 2006). Recruiting college seniors in a tight labor market

has meant that organizations have to be cognizant of their image because of the strong relationships between a company's image and students' application intentions (Lemmink, Schuijf, & Streukens, 2003). Students in this situation usually feel that they have multiple career options (Collins & Stevens, 2002), and the people who are currently employed may still stay in the labor market only because they want to look for better jobs (Maurer & Liu, 2007). Such evidence suggests the following:

Proposition 7: The economic performance of the hospitality industry is related to the choice decisions of hospitality organizations/recruiters and graduating seniors.

DISCUSSION

There are three practical implications of the RCMCR for the agents involved in the hospitality recruiting process. First, it helps hospitality organizations/recruiters understand the college recruiting process and how to effectively manage their effort to hire college seniors. According to the Bureau of Labor Statistics, U.S. Department of Labor (n.d.), the U.S. leisure and hospitality industry will need an additional 1.8 million workers by 2016. A recent meta-analysis by Kristof-Brown, Zimmerman, and Johnson (2005) found that employees' person-organization-fit and person-job-fit was negatively correlated to employees' intent to quit and also employee turnover. Tepeci and Bartlett (2002) also found similar results in a laboratory setting with 187 hospitality management students. These findings lend credence to the fact that recruiters are becoming more selective in their hiring decisions. Second, graduating seniors can influence the organizations/recruiters' perceptions of person-job-fit with the right "impression management" tactics during interviews (Kristof-Brown, Barrick, & Franke, 2002). The RCMCR assists hospitality seniors in understanding hospitality organizations'/recruiters' hiring process. By understanding this process graduating seniors can better prepare for the interviewing process and enhance their chances of getting a job offer in a competitive hiring environment. Last, hospitality programs and career centers who moderate the relationships between hospitality organizations/recruiters and hospitality seniors can also benefit from the RCMCR. Engelland, Workman, & Singh (2000) suggested that both an academic program and career center can be evaluated with the "career success approach," which is assessed by the quality of placements graduates receive, their job performance, career path, earning levels, and promotions. By knowing the graduates' job choice preferences and the organizations'/recruiters' selection process and criteria, these third party agents can enhance the hospitality recruiting process for organizations/recruiters and graduating seniors. In return, students' career success will impact a hospitality program's image in the hospitality industry as well as in the academic disciplines (Pavesic, 1993).

This paper also has several research implications. For example, many past empirical studies have examined job applicant's intention to accept a job but not their actual job choices (Chapman et al., 2005). The RCMCR suggests that researchers measure the "actual" choices of organizations/recruiters and job applicants. This would address a major limitation of the past studies in this discipline. The RCMCR provides a theoretical framework for future research on hospitality graduating seniors' job choice behavior and hospitality organizations'/recruiters' selection criteria. Specifically, researchers can study the college recruiting phenomena with the seven propositions in three categories that are depicted in Table 1. Besides these propositions, researchers can also examine the interactions among the hospitality organizations/recruiters, career centers in hospitality programs, and graduating seniors. Hospitality organizations/recruiters might evaluate the effectiveness of the college recruiting process according to recruiting results and feedback from career centers and seniors. A study could test the effect of an organizations' previous recruiting experience on future decisions and recruiting activities. Another possible study could focus on the impact of a hospitality organization's previous successful recruiting experience on hospitality graduating seniors' decisions to interview and accept a job offer.

Table 1
Categories of the Research Propositions

Categories	Research Propositions
1. Selection criteria and decisions of hospitality organizations/recruiters	P5
2. Job choice preferences of hospitality graduating seniors	P1, P2, P3, and P4
3. Influence of external factors on the decisions of organizations/recruiters and graduating seniors	P6 and P7

The RCMCR has possible theoretical limitations because it does not account for all the possible factors in the decision process of hospitality organizations/recruiters. Literature in employment interviews suggests that there are many other factors that influence recruiters' hiring decisions. Anderson (1992) emphasized that recruiters' experience and training, cognitive behavior, and discriminatory practices affect their decisions. Jelf (1999) stated that recruiters' pre-impression of the job applicants, different recruiting processes, and different selection procedures (e.g. structured interviews vs. unstructured interviews) have impacts on recruiters' decisions. Posthuma, Morgeson, and Campion (2002) added the following influential factors to recruiters' hiring decisions in their review: recruiters' stereotypes and expectancies, measurements for the interviews, stimulus materials and sample type, differential interviewer validity, the purpose of the interviews, and legal compliance issues. Future studies on rational choice theory in college recruiting should add one or more of these variables to the model and test their relationships with the agents.

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EMPLOYEE SATISFACTION, CUSTOMER SATISFACTION AND FINANCIAL PERFORMANCE

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ABSTRACT

The purpose of this study is to examine the relationship between employee satisfaction and customer satisfaction, and to examine the impact of both on a hospitality company's financial performance. Specifically, this study explores three major relationships as presented in Figure 1: (1) the relationship between customer satisfaction and profits; (2) the relationship between employee satisfaction and profits; and (3) the relationship between customer satisfaction and employee satisfaction. Data for this study was collected from the employees, customers and managers of 3 and 4 star hotels. Structural equation modeling (SEM) with a two-stepp approach was utilized to empirically test the proposed hypotheses and the relationships between the constructs in this study. Findings suggested that while customer satisfaction has positive significant impact on financial performance, employee satisfaction has no impact. However, findings indicated that the impact of employee satisfaction is mediated by customer satisfaction.

Key Words: service-profit chain, employee satisfaction, customer satisfaction, financial performance

INTRODUCTION

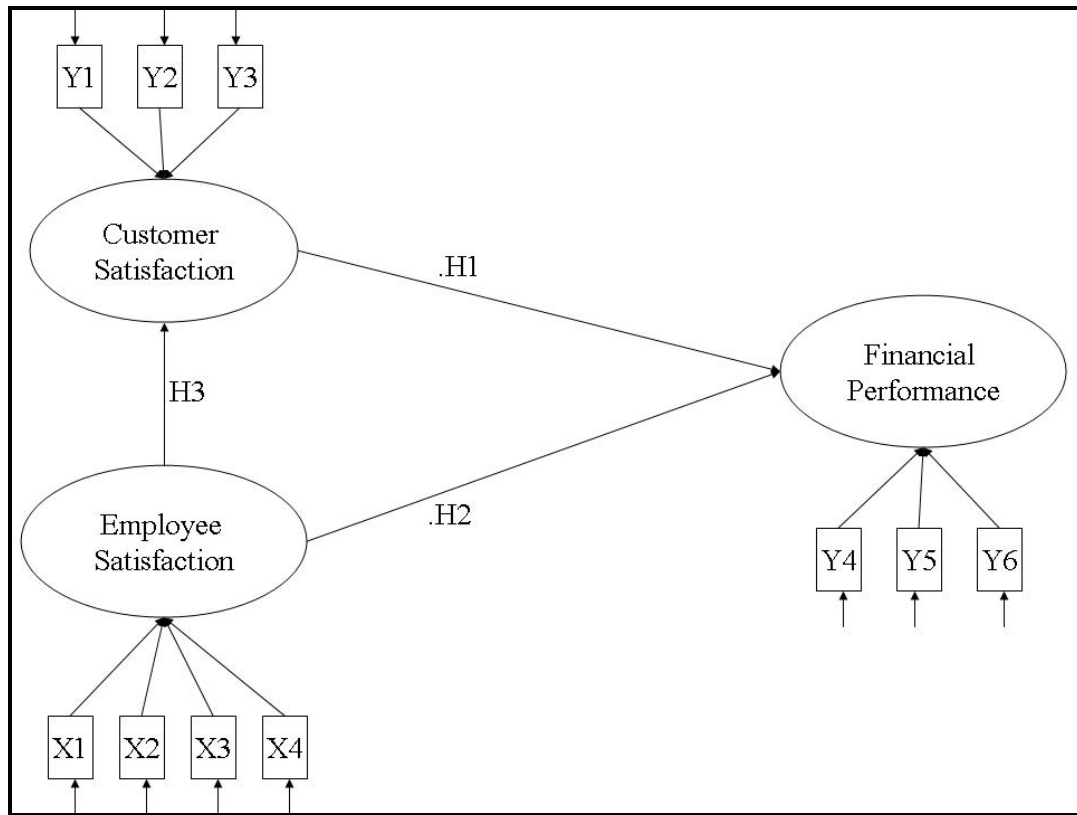
Several studies suggest that there is a positive relationship between employee satisfaction and customer satisfaction (Bernhardt, Donthu and Kennett 2000; Harter, Schmidt, and Hayes, 2002; Koys, 2001; Tornow and Wiley, 1991; Wangenheim, Evanschitzky and Wunderlich 2007). Because of this assumed positive relationship, employee satisfaction has received significant attention from researchers and became a critical issue within the last two decades (Matzler and Renzl 2007). There is no doubt that employee satisfaction is critical in the service industry because of the nature of the industry (Lam, Zhang and Baum 2001). As suggested by "the service profit chain" providing employees with a superior internal working environment will lead to satisfied employees who are both loyal to the organization and able to provide the customer with an excellent service experience. Customers will recognize and value the outstanding service afforded them. Over time, they will exhibit loyalty behaviors such as continued purchasing and increased referrals. These loyalty behaviors will generate both market share and profitability increases for the service firm (Heskett, Jones, Loveman, Sasser, and Schlesinger 1994; Heskett, Sasser and Schlesinger 1997).

Because of the assumption that satisfied employees will create satisfied and loyal customers, which will result in higher sales and, therefore, higher financial returns, service companies have been allocating significant resources for employee and customer satisfaction and retention. However, some researchers raise serious concerns about the heavy emphasis placed on customer satisfaction and whether or not it relates to bottom-line performance (Bernhardt, Donthu and Kennett 2000; Zeithaml, Parasuraman, and Berry 1990). Gursoy and Swanger (2007) suggest that in hospitality and tourism industry attention to service and customer satisfaction is considered to be a "given" factor, which is an expected and natural part of day-to-day operations. Hospitality and tourism companies cannot survive without satisfied customers; however, having satisfied customers may not guarantee the success of any hospitality and tourism business. Even though customer satisfaction and retention is one of the most studied topics in the hospitality and tourism literature, the impact of customer satisfaction on profits or other performance measures have not received much attention.

The purpose of this study is to examine the relationship between employee satisfaction and customer satisfaction, and to examine the impact of both on hospitality company's financial performance measures.

Specifically, this study explores three major relationships as presented in Figure 1: (1) the relationship between customer satisfaction and profits; (2) the relationship between employee satisfaction and profits; and (3) the relationship between customer satisfaction and employee satisfaction. In the next section, the theoretical background for this study highlighting past research linking employee satisfaction to customer satisfaction and their impact on financial performance measures are presented. Once an understanding of the appropriate theoretical framework is presented, employee satisfaction, customer satisfaction and their relationships with financial performance are established, appropriate hypotheses are presented, and the methodology and findings of the study are furnished. Finally, in the discussion section, the conclusions and limitations are presented along with managerial and research implications of the study finding

Figure 1
Proposed Model: Satisfaction and Financial Performance



LITERATURE REVIEW

Globalization and free trade continue to change the business environment and increase the global competition. In today's business environment, staying competitive and delivering satisfactory financial return to the owners and shareholders, managers heavily depends on how effectively managers can cope with continuous and unexpected changes. The ability to respond quickly and effectively (time-based competition) and to satisfy customer needs has become a defining characteristic of competitiveness and of success for many companies (Gursoy and Swanger 2007). Therefore, customer satisfaction has been one of the most frequently examined topics in hospitality tourism literature. Findings of previous studies suggest that employees are likely to play a significant role on customer satisfaction (Spinelli and Canavos 2000; Wu 2007). Since most hospitality and tourism products heterogeneous and inseparable, hospitality and tourism employees tend to be much more involved and their involvement and interaction with customers are likely to play a significant role in quality perceptions and customer satisfaction because hospitality and tourism products are often highly complex and a summation of interaction, exchange and performance between employees and customer (Bitner, Booms and Tetreault 1990).

Since any service company's intangible assets reside in employees' know-how and skills, and their future heavily depends on employees and quality of the interactions between customers and employees, employee satisfaction and retention has become one of the most critical issues facing the hospitality and tourism industry in recent decades (Matzler and Renzl 2007). In recent decades, service companies have been allocating significant resources for employee retention because most hospitality professionals and research suggest that lowering employee turnover is likely to have significant impact on the bottom-line. Literature further suggests that employee retention and customer retention are closely correlated. Employees who are happy and satisfied with their work environment are more likely to stay with the company. This is likely to result in lower turnover and therefore a higher profitability due to decreasing cost of attracting and training new employees. However, studies also suggest that satisfied employees are also likely to provide better services, which is likely to result in a satisfactory service experience for their customers. This satisfactory service experience, in return, is likely to have significant impact on repeat business and customer retention. Studies also suggest that customer retention is likely to increase a company's profitability because retaining an existing customer costs a lot less than attracting a new one.

The Service-Profit Chain (Heskett, Sasser and Schlesinger 1997) supports the arguments that satisfied employees are likely to provide better services, which is likely to result in a satisfactory service experience for their customers, and better financial performance for the company. The Service-Profit Chain (Heskett, Sasser and Schlesinger 1997) was developed from an analysis of service organizations with the aim of linking operational resource investments to marketing, operational, and financial outcomes. The service-profit chain combines three distinct, but closely related streams of research: the cycle of employee capability, the customer quality/value equation, and the cycle of customer loyalty. The cycle of employee capability takes a human resource perspective on the relationships between employee satisfaction, turnover, and productivity. The quality/value equation describes how customers perceive and assess service offerings. The cycle of customer loyalty examines the effect that customer satisfaction has on customer loyalty and how they both play a vital role in determining financial outcomes (Loveman 1998; Loveman, and Heskett 1999). Heskett et al (1997) suggest that the service-profit chain provides the means for implementing a firm's strategic service vision. The strategic service vision includes developing an operating strategy and service concept and segmenting the customer market. This vision determines the goals and performance expectations of the organization. Once these goals have been established, the service-profit chain is a tool that can be used to execute the goals.

Even though the service profit chain and several studies suggest that satisfied employees and customers are likely to result in better financial performance, testing this relationship empirically has not received much attention. Only a small number of empirical studies have been conducted linking satisfaction and performance (Bernhardt, Donthu and Kennett 2000; Zahorik and Rust, 1992). However, studies that examined the link between satisfaction and performance measures reported contradictory findings (Anderson, Fornell, and Lehmann, 1994; Boulding, Kalra, Staelin, and Zeithaml, 1993).

CUSTOMER SATISFACTION AND FINANCIAL PERFORMANCE

As suggested by the service profit chain, the relationship between customer satisfaction and financial performance should be positive and that the higher the customer satisfaction, the more favorable the performance measures should be. However, while some studies suggest that this positive relationship exists (Bernhardt, Donthu and Kennett 2000; Nelson, Rust, Zahorik, Rose, Batalden, and Siemanski 1992), others argue that customer service-quality perceptions and satisfaction are sometimes, but not always, reflected in profits (Schneider 1991). Bernhardt, Donthu and Kennett (2000) suggest that a positive and significant relationship exists between changes in customer satisfaction and changes in financial performance of a firm. However, this positive and significant relationship may be obscured in the short run by many factors but it may be significantly positive in the long run.

Several other researchers suggest that the relationship between customer satisfaction and financial performance may not be positive (Tornow and Wiley 1991; Wiley 1991). As suggested by Bernhardt, Donthu and Kennett (2000) these findings might seem counterintuitive, however, they may not be that surprising. For example, Gursoy and Swanger (2006) argues that while customer satisfaction is at the very core of hospitality operations, customer satisfaction may not result in higher financial performance because it considered as a "given" factor, which is an expected and natural part of day-to-day operations. Because consumers expect to be satisfied when they patronize any service businesses, hospitality and tourism businesses cannot survive without satisfied customers. In addition, a multitude of factors could mask the true relationship between these constructs. For example, when a

business decides to increase its customer satisfaction, they may end up spending a large sum of money to implement this. Because of the amount of investment on several factors such as training, upgrades of facilities, etc. a business may be able to increase customer satisfaction, but this may result in lower profit. On the other hand, internal cost-cutting measures such as lowering training expenses or postponing facility upgrades may make a firm seem more profitable in any given time period, even if customers are not satisfied. Even though many actions of a company that are beyond the scope of customer satisfaction may have such a significant impact on profits, customer satisfaction is still likely to play a significant role in a company's financial success. Therefore, this study hypothesizes a significant positive relationship between customer satisfaction and financial returns.

Hypothesis 1: There is a significant positive relationship between customer satisfaction and financial performance.

EMPLOYEE SATISFACTION AND FINANCIAL PERFORMANCE

Studies suggest that employee satisfaction plays a primary role in helping companies achieve financial goals. The logic for this argument is that if a company takes care of its employees, the employees will take care of the customers. Taking care of employees can be defined as providing better pay, ongoing training, and making employees feel secure (Gursoy and Swagner 2007; Koys 2003; Schneider 1991). Satisfied employees are likely to be more motivated and harder working than dissatisfied ones. As suggested by the service-profit chain, if employees feel that the company takes good care of them, they are, in return, likely to take time to provide a better service to meet and/or exceed customer's expectations. This is likely to lead to higher satisfaction among those customers, which in return will lead to higher profits (Koys 2003). Company employees who are willing to work together, who are able to work beyond expectations, and who put themselves into the manager's shoes tend to work more efficiently, generate more revenue, and create higher customer satisfaction (Koys 2003). However, others suggest that satisfied employees may not always lead to better financial performance. For example, Tornow and Wiley (1991) reported a consistent negative relationship between employee satisfaction (with such items as pay and benefits) and financial results. Furthermore, Wiley (1991) findings indicated that there was no relationship between overall employee satisfaction and financial performance. Similar findings were reported by Bernhardt, Donthu and Kennett (2000) that the relationship between employee satisfaction and financial performance was "virtually nonexistent." As suggested by Bernhardt, Donthu and Kennett (2000), the true relationship between employee satisfaction and financial performance may not be easily identifiable because of any number of factors. For example, employees might be happy, because their company has invested money in employee benefits or improvements that have an impact on the employee but not the customer, resulting in a profit reduction. Based on the preceding discussion, the following hypothesis is proposed:

Hypothesis 2: There is an insignificant relationship between employee satisfaction and financial performance.

CUSTOMER SATISFACTION AND EMPLOYEE SATISFACTION

The relationship between customer satisfaction and employee satisfaction is the one relationship that does not seem to yield conflicting results. Studies suggest that employee and customer satisfaction are positively correlated (Spinelli and Canavos 2000; Matzler and Renzl 2007; Tornow and Wiley 1991; Wiley 1991; Wu 2007). As suggested by the service profit chain process providing employees with a superior internal working environment will lead to satisfied employees who are both loyal to the organization and able to provide the customer with an excellent service experience, which will result in satisfied customers. Therefore, the following hypothesis is proposed:

Hypothesis 3: There is a positive relationship between customer satisfaction and employee satisfaction.

METHODOLOGY

Data for this study was collected from the employees, customers and managers of three and four star hotels. Employee satisfaction data was gathered from the employees, customer satisfaction data were gathered from the customers and the financial data was gathered from the managers.

The employee satisfaction data was collected from the employees of three and four star hotels. Before collecting the data, each property was assigned a code to make sure that the response from the employees of each property was assigned to the right property. A self administrated survey was used to collect data from the employees.

Customer satisfaction data was collected through a series of surveys conducted at each property. The financial data was collected from the managers of individual properties.

Employee satisfaction was measured by four variables on a five-point Likert-type scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Customer satisfaction was also measured on a five-point Likert-type scale ranging from 1 = *strongly disagree* to 5 = *strongly agree* with three variables. Financial performance was measured with three indicators.

DATA ANALYSIS

The properties of the items of the constructs in the proposed model were tested using the LISREL 8 structural equation analysis package with maximum likelihood (ML) method of estimation (Anderson and Gerbing, 1988), in combination with the two-stage process recommended by Sethi and King (1994) and Anderson and Gerbing (1988).

First, a confirmatory measurement model that specifies the posited relations of the observed variables to the underlying constructs, with the construct allowed to intercorrelate freely, was tested. The adequacy of the individual items and the composites were assessed by measures of reliability and validity. The composite reliability as calculated with LISREL estimates, is analogous to coefficient alpha and is calculated by the formula provided by Fornell and Larcker (1981). Further, convergent validity and discriminant validity were assessed.

Afterwards, the structural model was tested. The structural portion of the SEM allows for the testing of multiple equations with multiple dependent variables. This statistical method provides parameter values (i.e., path coefficients) for each of the proposed relationships and determines their respective significance.

As fit indices, the chi-square statistics (and associated *P* values) were examined first. However, as noted by Joreskog (1993, p. 309) “since chi-square is *N*-1 times the minimum value of the fit function, the chi-square test tends to be large in large samples.” Because of the large effect of sample size on the chi-square values (and associated *P* values), other fit indices were also selected to measure the fit of the tested models based on the recommendations of several researchers from a number of different disciplines. These selected fit indices were the goodness-of-fit index (GFI), the normed-fit index (NFI), the parsimonious normed-fit index (PNFI), the non-normed-fit index (NNFI), the comparative fit index (CFI), and the critical N statistic. Values of GFI, NFI, CFI, NNFI, and PNFI range from zero to 1.00 with a value close to 1.00 indicating good fit (Byrne, 1989).

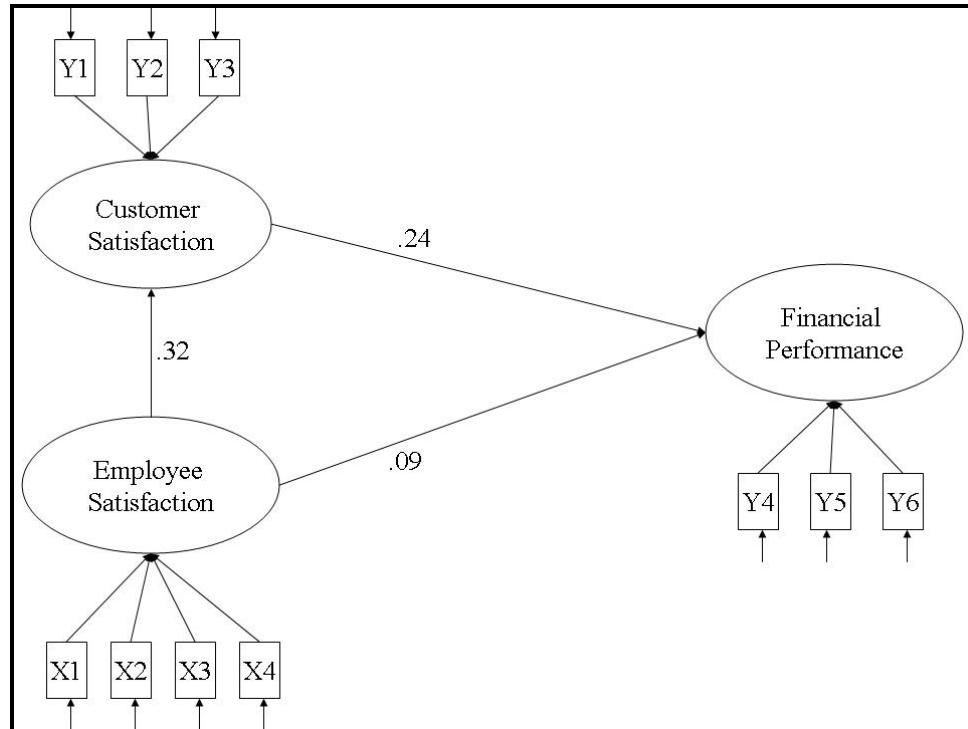
RESULTS

The overall fit of this final measurement model was $\chi^2_{(32)} = 85.27$ ($p = 0.0$); GFI = .98; NFI = .97; CFI = .98, and IFI = 0.98. Further, the, root mean square residual (RMR) was .028. Additionally, convergent validity was established for all indicators of each construct by comparing each indicator’s estimated pattern coefficient with its standard error.

Figure 2 shows the estimated path coefficients and significant links between the exogenous construct and endogenous constructs. As presented in Figure 2, this study examined three major relationships (1) the relationship between customer satisfaction and financial performance; (2) the relationship between employee satisfaction and financial performance; and (3) the relationship between customer satisfaction and employee satisfaction. The theoretical models chi-square value with 32 degrees of freedom was 85.27. All of the other fit indices examined in this study indicated that the proposed theoretical model is acceptable (GFI = 0.98; NFI = 0.97; CFI = 0.98, and IFI = 0.98). Further, the root mean square residual (RMR) was 0.028.

Three hypotheses were proposed to examine the impact of customer satisfaction, employee satisfaction on financial performance and the relationships between employee satisfaction and customer satisfaction. The first hypothesis proposed a significant relationship customer satisfaction and financial performance. This hypothesis was supported (completely standardized $b = 0.24$; $t\text{-value} = 6.30$). The second hypothesis that proposed an insignificant relationship between employee satisfaction and financial performance was supported (completely standardized $b = 0.09$; $t\text{-value} = 1.80$). The third hypothesis that proposed a direct positive relationship between customer satisfaction at time period t and employee satisfaction (completely standardized $b = 0.34$; $t\text{-value} = 5.93$) was also supported.

Figure 2
Employee satisfaction, customer satisfaction and financial performance



DISCUSSION AND IMPLICATIONS

Within the last few decades, customer satisfaction has emerged as one of the most important factors for the financial success of hospitality and tourism industry due to the nature of the industry (Iacobucci, Grayson and Ostrom 1994). As suggested by others, this study found that customer satisfaction is likely to play a significant role in a company's financial performance. Customer satisfaction is especially important for service businesses because satisfaction is a prerequisite for loyalty and word-of-mouth behavior (Spineli and Canavos 2000). It has been suggested that retaining an existing customer costs a lot less than attracting a new one (TARP 1986; Gursoy, McCleary and Lepsito 2007) and that repeat customers are considerably more profitable than single transaction customers (Reichheld and Sasser 1990).

Since the findings suggest that customer satisfaction is crucial for a better financial performance, providing exceptional customer service by exceeding customers' expectations is likely to offer opportunities for growth. Clifford and Cavanagh (1985) suggest that high growth companies exist even in declining industries as long as they identify and pay attention to key success factors. How is it that a company like Southwest Airlines can survive, and even thrive, when the rest of their industry is in financial turmoil—many of their competitors on the verge of bankruptcy? Conversely, how can a company like Krispy Kreme go from being the “darling of Wall Street” just a short time ago to being in financial chaos and under investigation by the Securities and Exchange Commission? The answer to these questions is that some companies do a better job in identifying internal strategic success factors and using them to take advantage of external opportunities while minimizing the threats—they focus on performance-enhancing factors or otherwise called core competencies. Findings of this study suggest that customer satisfaction is a key internal success factor for any service company.

While the findings suggested that customer satisfaction has a significant impact on financial performance, findings also suggested that employee satisfaction has no direct impact on financial performance. There might be several explanations for this finding. One reason may be that the relationship between employee satisfaction and financial performance may not be easily identifiable because of any number of factors. For example, one way of making employees happy is to invest money in employee benefits, training or improvements. This investment is

likely to increase employee satisfaction while resulting in a short-term profit reduction. In addition, there may be a lag effect. It is possible that investment in employees may increase profits in long term. Therefore, it may be necessary to examine the long term effects of investment in employees and their satisfaction on financial performance. Another reason why this relationship was found to be insignificant may be because of the mediating effects of customer satisfaction.

As suggested by previous studies employee satisfaction plays a primary role in helping companies achieve financial goals because if a company takes care of its employees, the employees will take care of the customers. Findings of this study suggest that the relationship between employee satisfaction and financial performance is likely to be mediated by customer satisfaction. Satisfied employees are likely to be more motivated and work harder to provide a satisfactory service to customers than dissatisfied ones (Paradise-Tornow 1991). As suggested by the service-profit chain, if employees feel that the company takes good care of them, they are, in return, likely to take time to provide a better service to meet and/or exceed customer's expectations. This is likely to lead to higher satisfaction among those customers, which in return will lead to higher profits (Koys 2003). This finding suggest that even though it is hard to observe direct impact of employee satisfaction on financial performance, service companies cannot survive without satisfied employees because satisfied employees are the one who provide satisfactory service experience to customers. Therefore, companies need to make sure that their employees are happy and satisfied with what they do.

LIMITATIONS AND RECOMMENDATIONS FOR FUTURE STUDIES

Like any other study, this study is not free of limitations. One of the main limitations of this study is that both customer satisfaction and employee satisfaction were examined as a unidimensional constructs. However, other studies suggest that both customer satisfaction and employee satisfaction are multi-dimensional constructs. Measuring them as unidimensional construct is likely to limit the generalizability of the findings. Future studies should utilize multi-dimensional constructs to capture the true essence of both employee and customer satisfaction

Furthermore, a company's financial performance may be influenced by several factors including satisfaction. However, this study did not examine the other factors that may influence the financial performance of a company.

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SWITCHING BARRIERS: THE DEVELOPMENT OF A MULTI-ITEM SCALE IN A FULL-SERVICE RESTAURANT SETTING

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University of Houston

and

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ABSTRACT

This research attempted to develop a measurement scale of switching barriers (SBs) by identifying existing components of SBs. Following Maxwell's (2005) guidelines for qualitative research, four categories of SBs (preference, switching costs, relational investment, and lack of alternatives) were identified. Based on quantitative analyses, a multi-item scale of SBs was produced. This quantitative procedure followed Churchill (1979) and Gerbing and Anderson's (1988) guidelines. The multi-item scale showed strong evidence of unidimensionality, reliability, and validity. Four SB categories were well accounted by two higher order dimensions (positive and negative). Implications were discussed with study limitations and recommendations for future research.

Key Words: positive and negative switching barriers, scale development, full-service restaurant

INTRODUCTION

Researchers agree with the notions that satisfied customers do not necessarily remain with the current provider and dissatisfied customers do not always switch (Day, 1984; Rowley & Dawes, 2000). In other words, although some defections cause dissatisfaction, consumers can simply remain inactive and take no action at all (Day, 1984). One rationale for such an occurrence is that the costs of changing to an alternative provider act as disincentives/obstacles to switching. These costs, which can be also described as switching barriers (SBs), help service providers prevent customer switching in a negative situation (e.g., a temporary decline in service quality or a service failure), and give the service provider time to recover/rebuild adequate satisfaction levels before switching actions (Burnham, Frels, & Mahajan, 2003). Thus, in the current competitive environment, identifying alternative means of inhibiting customer switching, such as SBs, is particularly useful for retaining customers in the service industry (Ranaweera & Prabhu, 2003).

Many researchers in marketing and consumer literature have assessed existing SBs and their roles in explaining consumer post-purchase behaviors. The measures of SBs used in the previous literature, however, have not agreed to each other, as such measurements were developed using different methods across different contexts. In addition, validity and reliability of these measures have rarely been examined because the measures were developed without applying a rigorous scale development process. It's not clear that the SB measurement scales in the previous literature are adequate for customer behavior application in the restaurant industry. Furthermore, numerous researchers agree that SBs involve two major dimensions (i.e., positive and negative), and each dimension contains several components of SBs (e.g., Egan, 2001; Jones et al., 2000; Vazquez-Carrasco & Foxall, 2006). For example, negative dimension includes SBs that make customers feel entrapped in the current relationship (e.g., switching costs and a lack of alternatives), and positive dimension involves barriers that make customers willingly remain in a relationship (e.g., relational benefits) (Egan, 2001; Vazquez-Carrasco & Foxall, 2006). This literature implies that the first order (components of positive and negative dimensions) and second order (positive and negative dimensions) measurement model of SBs should be simultaneously considered. Positive and negative dimensions are the higher level of abstraction where the indicators are actually latent variables. However, to the best of our knowledge, there is no empirical research dealing with this fact. Overall, there is a strong need to identify existing SBs restaurant customers possibly perceive and to develop a reliable and valid scale to measure such barriers. In addition, the first order and second order measurement structure of SBs should be subject to rigorous empirical testing. Accordingly, the objectives of this study were to develop a measurement scale of perceived SBs

by identifying components of existing SBs and to establish whether those identified factors can be adequately accounted for by two second order factors.

REVIEW OF LITERATURE

Conceptualization of Switching Barriers

Broadly, Jones et al. (2000) defined SBs as all factors that make customers more difficult and costly to changing service providers. Similarly, Colgate and Lang (2001) indicated that SBs explain why customers who have seriously considered exiting the relationship with their current service provider, decide to stay with their provider. Thus, they viewed SBs as factors influencing customer retention. However, some researchers argued that SBs should be described as the degree to which customers experience a sense of being locked into a relationship with a provider based on the various costs (e.g., economic, social, or psychological costs) associated with exiting the relationship with a particular service provider (Barnes, 1994). These researchers focused mainly on the negative scope of SBs, viewing the relationship based on SBs as pseudo-relationships that make customers feel entrapped (Barnes, 1994; Jones et al., 2000). That is, customers remain with their current provider only because of high switching costs. However, the positive scope of SBs should be also considered because some affirmative aspects of the barriers make it difficult for customers to leave a current service provider. For instance, relational benefits (e.g., social, confidence, and special treatment benefits), stemming from a valued long-term relationship with a provider, considered more important than service performance (Gwinner, Gremler, & Bitner, 1998), also work as constraints that prevent customer switching (Vazquez-Carrasco & Foxall, 2006). As another example, loyalty program benefits, such as hard benefits (e.g., point accumulation) that build credibility and customer attention/information and soft benefits (e.g., reinforcement of the customers' sense of special status and involvement of special information) that build long-term loyalty, act as inhibiting factors of switching (Balabanis et al., 2006).

Several researchers have provided theoretical support for a distinction between positive and negative SBs. Hirschman (1970) first differentiated “wanting to be” in a relationship from “having to be” in a relationship. In his distinction, “wanting to be” could be described as a positive reason for remaining in a relationship and “having to be” can be characterized as a negative reason for staying in a relationship. Consistent with this notion, Jones et al. (2000) stated that SBs can be seen as either positive or negative in nature. In a similar way, in their empirical investigation of SBs and their influence on customer behaviors, Vazquez-Carrasco and Foxall (2006) distinguished positive from negative SBs. They found that positive (i.e., relational benefits) and negative SBs (i.e., switching costs and availability and attractiveness of alternatives) have a different level of importance in determining customer post-purchase behaviors. Specifically, positive SBs play a greater role in determining satisfaction and retention than negative SBs. Despite the lack of a conceptual distinction between two types of SBs, numerous consumer behavior studies verified the significant role of either positive or negative SBs in explaining consumer behaviors (e.g., Colgate & Lang, 2001; Jones et al., 2000; Patterson, 2004; Ranaweera & Prabhu, 2003; Vazquez-Carrasco & Foxall, 2006). Thus, in line with Jones et al.'s (2000) broad perspective, SBs in this study indicates both positive and negative SBs that dissuade restaurant customers from switching to another restaurant that provides comparable prices, services, or benefits. In particular, positive SBs refer to inhibiting factors that provide an affirmative reason to remain, reflecting wanting to be in a relationship, and negative SBs refer to inhibiting factors that provide a passive reason to stay, reflecting having to be in a relationship.

Existing Measures and Their Limitations

Components of SBs and their roles have been widely discussed and investigated in numerous fields. In the early stage of SB studies, researchers simply provided elements of SBs without thorough procedure to identifying them in a certain context (e.g., Fornell, 1992; Ping, 1993). For instance, Fornell (1992) presented a list of barriers without definition or conceptualization of construct (e.g., special treatment, emotional costs, search costs, transaction costs). Based on the conceptual domains of structural commitment/constraint in the previous literature, Ping (1993) established measurement items for components of SBs and assessed them in channel relationships. That is, he utilized the structural commitment/constraint as a measure of the extent to which as customers need to continue a current relationship. These measures may not be applicable in other consumer contexts because barriers for switching in these studies were not identified through adequate method.

Many researchers in recent years have attempted to develop a basic scale of SBs using qualitative approach (e.g., Burnham et al., 2003; Yanamandram & White, 2006). Specifically, these researchers first found out existing SBs through qualitative interviews with industry managers or customers in a specific field, and develop a scale

based on their description or through focus group discussion. For example, Burnham et al. (2003) assessed customers' perceived SBs using the items developed by interviewing with three different types of industry managers (i.e., long-distance, local-telephone service, insurance industries), conducting two focus groups, and reviewing the SB literature. Yanamandram and White (2006) conducted a qualitative study interviewing with 28 managers who are involved in the choice of service providers in the business-to-business services sector. However, adequateness of these identified SBs as a measurement scale has not been empirically tested. In addition, quantitative study was further required to validate the measure. Unlike other scholars, Colgate and Lang (2001) have identified inhibiting factors of switching through a mailing survey with about 2000 actual customers. In two financial service industries, they identified four factors of SBs respectively (i.e., relationship investment, negativity, apathy, and service recovery). They also found that the factor containing somewhat negative reasons for customers staying with their current provider, namely negativity (e.g., switching costs). However, they used exploratory factor analytic approach to develop variables of SBs. Since their objective was only to identify existing SBs, some necessary steps in developing a scale, such as item refinement and validity assessment were missing.

Overall, in addition of the limits associated with each measurement discussed above, the following considerations minimize their usefulness in the restaurant industry. First, since these measures were developed as part of empirical stages of their study, standard psychometric scale development procedure suggested by Churchill (1979) or Gerbing and Anderson (1988) were not used. Second, while some of the measures may be acceptable in the sector in which they were developed, these measures have not developed to specifically assess restaurant customers' perceived SBs. That is, identified key barriers in their studies cannot appropriately represent SBs restaurant customers possibly perceive.

Major Components of Positive and Negative Switching Barriers

The SBs identified and used in the previous consumer literature can be easily divided into positive and negative. In addition, barriers in the previous research could be generally organized into four categories; switching costs and lack of alternatives (negative) and relational investment/benefit and service recovery (positive) (e.g., Colgate & Lang, 2001; Jones et al., 2000; Ranaweera & Prabhu, 2003; Sharma & Patterson, 2000; Vazquez-Carrasco & Foxall, 2006; Yanamandram & White, 2006).

1) **Switching Costs:** Researchers generally agree that switching costs involve both monetary and non-monetary costs (Balabanis et al., 2006; Dick & Basu, 1994). Monetary costs, which are also described as economic/financial costs in the literature (e.g., Balabanis et al., 2006; Ranaweera & Prabhu, 2003), can be regarded as a sunk cost that appears when customers switch their service provider (i.e., actual financial expenses and loss of financial benefits) (Aydin et al., 2005). Non-monetary costs involve time/effort costs, convenience loss, and psychological costs that can be also described as a perceived risk. Changing from the current service provider to a new service provider requires an investment of time/effort and monetary expenses as well as a high degree of perceived risk (psychological costs) (Balabanis et al., 2006; Dick & Basu, 1994). Thus, switching costs act as a significant SB, preventing customers from leaving the current relationship (Colgate & Lang, 2001).

2) **Lack of Alternatives:** Previous research also indicated that a lack of alternatives, as perceived by customers, is an essential element of SBs (Colgate & Lang, 2001; Jones et al., 2000; Patterson & Smith, 2003). Jones et al. (2000) conceptualized lack of alternatives as "customer perceptions regarding the extent to which viable competing alternatives are available in the marketplace" (p 262). In a similar manner, lack of alternatives in this study can be described as the customers' perception of the magnitude of the lack of comparable/superior alternatives in the marketplace. When customers perceive a lack of superior alternatives, indifferent alternatives, or low benefits of defecting, the probability of terminating an existing relationship decreases (Sharma & Patterson, 2000).

3) **Relational Investment:** Relationship investment/benefit as a positive SB (Vazquez-Carrasco & Foxall, 2006), mainly stemming from a service provider's investment in the relationship with its customers, primarily include social, confidence, and special treatment (Vazquez-Carrasco & Foxall, 2006). In recent years, there has been increasing recognition of relationship investments from practitioners and academics due to the potential benefits for firms (i.e., customer retention or loyalty) and customers (i.e., confidence, social, and special treatment benefits) (Colgate & Danaher, 2000). Especially in the service industry, the intangible characteristics of the service and high degree of interaction between customers and their service provider boost the importance of relationship investment in enhancing customer-perceived relational benefits. Customers may lose such benefits as confidence, social, and special treatment by changing providers (Berry & Parasuraman, 1991), especially when a service provider offers its customers various resources, efforts, and attention specific to the relationship.

4) **Service Recovery:** The final category of SBs uncovered in the literature is service recovery. While service failures are major causes of customer switching acts (Keaveney, 1995), it have been generally believed that

well-executed recovery efforts can reverse dissatisfaction and help a provider to achieve even higher levels of satisfaction and retention rates from customers who received excellent recoveries than those who have not experienced any problems (Maxham & Netemeyer, 2002). Good and effective service recovery prevents customer switching from the current service provider to another. Thus, it is believed to be important to SBs (Yanamandram & White, 2006).

METHODS AND RESULTS

Qualitative Procedure for Identification of Switching Barriers

Since SBs have not been discovered in the restaurant industry, a qualitative approach using open-ended questions was chosen to identify restaurant customers' perceived SBs. The open-ended questions are believed to be adequate when discovering in-depth aspects of a particular phenomenon (e.g., Many customers revisit a specific restaurant although their previous experience at the restaurant was not pleasant) (Kumar et al., 2002). Research methods and procedures followed Maxwell's (2005) recommended guidelines for qualitative research. 1)

Questionnaire: An open-ended questionnaire was developed based on the literature review. This questionnaire was refined through the focus group. The focus group was comprised of managers of full-service restaurants, faculty members and graduate students in hospitality management who are familiar with the topic area. Questions were rephrased to improve clarity through this focus group. 2) **Sample and Data Collection:** A web-based survey was conducted to collect the data. The study population consisted of members of two professional academic organizations and staff at Midwestern University. The survey was electronically distributed to 1,040 randomly selected members who have dined at a full-service restaurant. Following Yanamandram and White's (2006) approach, respondents were asked to indicate a full-service restaurant that they chose to revisit even if they were not fully satisfied on a previous visit. Afterward, respondents were requested to tell stories about their reasons for revisiting the restaurant they indicated. This process helps them easily describe their reasons (Keaveney, 1995). A total of 164 questionnaires were completed for a response rate of 15.77%. The average age of the respondents was 45.24. Most of the respondents are female (64.60%) and Caucasian/White (84.50%). Approximately 65.90% of the participants described their experience within the last one month. Among 164 responses, judges removed 16 responses in which the response was judged to be vague and not to be precisely described because it can usually be assumed that the information from such responses are inaccurate (Keaveney, 1995). The data screening resulted in a final sample of 148. 3) **Results:** The data collected through the open-ended survey was analyzed using unit of analysis and categorization. Qualitative researchers usually define each sentence as a unit of analysis, and then categorize it into several predefined categories when using open-ended questions (Spiggle, 1994). The first step in the data analysis was to determine the appropriate unit of analysis because respondents' answers to the open-ended question can refer to either overall story or to discrete behaviors contained within the story. The independence of judges was required when coding the responses to make autonomous and apparent judgments without being influenced from another. Thus, two judges independently coded the responses. For instance, a participant stated, "I have a gift card, so I need to use it in this restaurant" when answering the open-ended question, it was coded as "gift certificate". That is, "gift certificate" worked as a barrier to switch. Upon completing the unit of analysis coding task, two judges compared their decisions regarding the coding of each response, and resolved disagreements by discussion. The next step was to sort the units into categories. "The essence of categorization is identifying a chunk or unit of data (e.g., a passage of text of any length) as belonging to, representing, or being an example of some more general phenomenon" (Spiggle, 1994, p. 493). A passage categorized with a specific label was a few words. Two judges developed categories based on the result of the unit of analysis and literature, and independently categorized the units into the categories. Disagreements were handled by discussion. In the process of coding and categorizing open-ended questions, evaluating interjudge reliability is considered as a critical issue. Thus, Perreault and Leigh's (1989) coefficient (I_r) was estimated by considering the observed proportion of agreement between judges and the total number of categories developed. The value (.92) was above .90, thus indicating high level of interjudge reliability (Perreault & Leigh, 1989). Overall, this whole procedure discussed provided four categories of SBs (i.e., preference, switching costs, relational investment, and lack of alternatives) that restaurant customers possibly perceive. Preference was the largest category, described by about 46.60% of the participants. This dimension involved components, such as personal preference of food, menu, and physical surroundings and family/friends/others' preference of the restaurant. Switching costs was the second largest category (25.73%). This category included monetary costs (loss of financial benefits and actual financial expense) and non-monetary costs (time, effort, psychological costs, and convenience loss). Relational investment was mentioned by 18.93% of all respondents. This category composed of confidence benefits, reliable benefit programs/services, and social/special treatment benefits. The last category was lack of alternatives that includes lack of alternatives' attractiveness, lack of

superior alternatives, and lack of availability of alternatives. This dimension was described by 8.73% of the respondents. Among these four factors, three SBs matched categories previously identified in the section of literature review (i.e., switching costs, relational investment, and lack of alternatives), and one barrier was developed based on the result of the unit of analysis. Although studies in the previous literature indicated that service recovery prevents customer switching (Colgate & Lang, 2001; Yanamandram & White, 2006), this factor was not included in major categories because only two respondents mentioned well-executed service effort as their reason to revisit.

Quantitative Procedure for Scale Development

The next step was to develop and refine a measurement scale using the SBs identified through the qualitative approach. A quantitative approach was used by conducting a Web-based survey. While traditional approaches in developing/improving a measure focus on reliability assessment using coefficient alpha, exploratory factor analysis (EFA), and various validity testing (e.g., Churchill, 1979; Nunnally, 1978), incorporating confirmatory factor analytic approach into the scale development procedure is a necessary step to test the quality of measure (Gerbing & Anderson, 1988). Thus, research methods and procedure were based on both Churchill (1979) and Gerbing and Anderson's (1988) guidelines for scale development. 1) **Questionnaire:** A multi-item measure, composed of all identified elements of SBs, was developed (see Table 1). Specifically, questions were developed based on the previous literature (e.g., Burnham et al., 2003; Colgate & Lang, 2001; Gwinner et al., 1998; Jones et al., 2000) and the participants' descriptions in the open-ended question. The questionnaire comprised of 17 items to assess SBs and 3 items to assess revisit intentions for the test of nomological validity. A revisit intention measure adapted from Maxham and Netemeyer (2002). A seven-point Likert type scale for all items was used (1 = strongly disagree, 7 = strongly agree). The questionnaire was pre-tested by restaurant managers and academics in hospitality management. 2) **Sample and Data Collection:** The questionnaire was transmitted by e-mail to 3,500 general U.S. restaurant customers randomly selected from an e-mailing list by an e-mail broker. A total of 406 complete responses were received. According to Keaveney's (1995) indication, the time frame (six months) is recent enough to reliably recall the service experiences. Thus, of these, 401 responses from participants who dined in a full-service restaurant within the last six months were only used for further analyses. The effective sample size was 401 and the final response rate was 11.46%. A total of 53.90% of the respondents were female; their average age was 43.23 years; and 56.90% described their experiences at the restaurant they visited within the past week. 3) **Data Screening:** Data screening was conducted. Testing for multivariate outliers revealed six significant cases (Mahalanobis' $D(17) > 40.79, p < .001$). Since these outliers can disproportionately influence on the overall results, these extreme outliers were excluded from further analyses. Testing for the normality of each variable suggested that several variables had a significant negative skewness. These variables were transformed using the square root transformation that gave the best results.

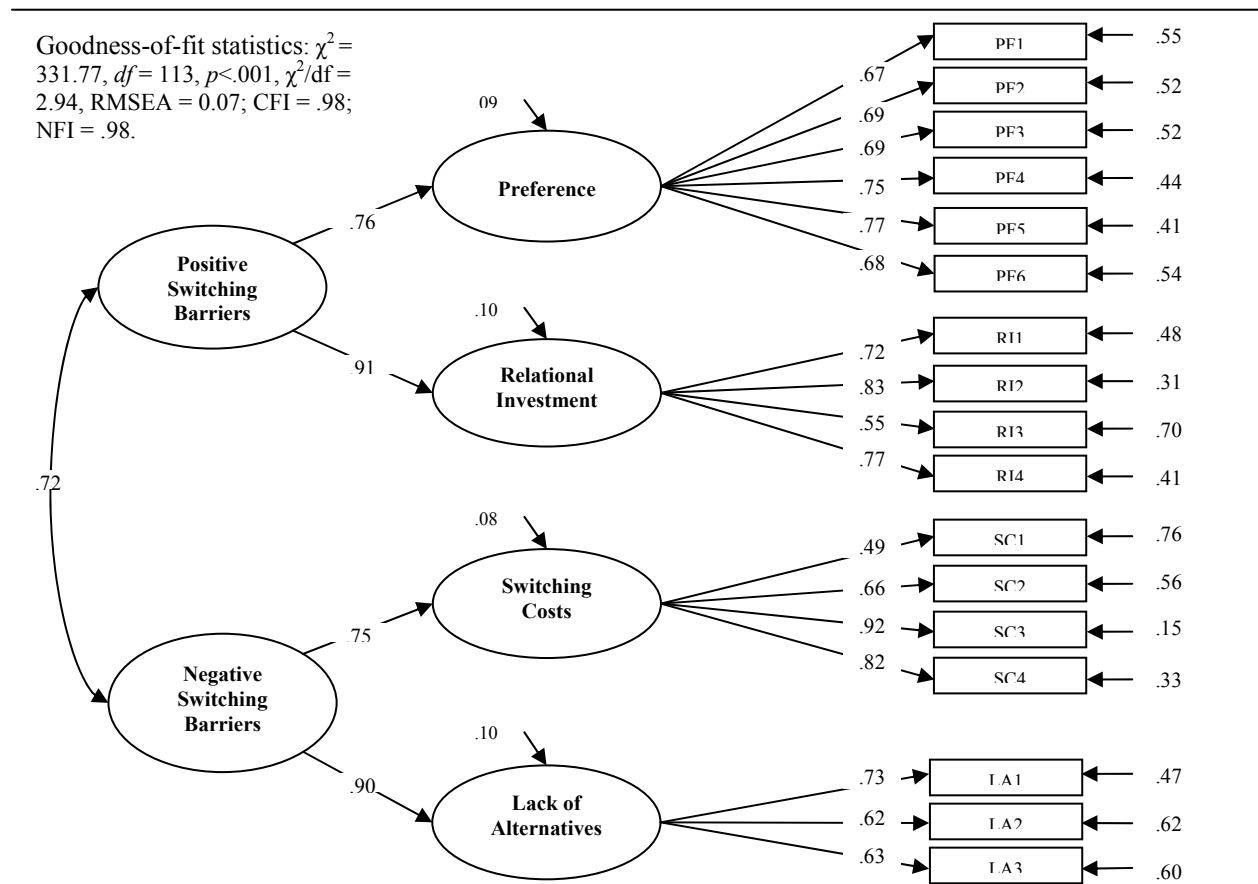
Table 1
First-order Factor Analysis Results (N=395)

Latent Variables (Coefficient Alphas) / Measurement Items	Standardized Loadings	t Value	Composite Reliability
Preference (.86)			.86
PF1 (Family preference)	.67	–	
PF2 (Friend(s) preference)	.68	11.79	
PF3 (Other's preference)	.69	11.76	
PF4 (Personal preference of food)	.75	12.73	
PF5 (Personal preference of menu)	.77	12.97	
PF6 (Personal preference of physical environment)	.68	11.70	
Relational Investment (.80)			.81
RI1 (Confidence benefit)	.72	–	
RI2 (Social benefit)	.83	14.89	
RI3 (Reliable benefit programs/services)	.55	10.15	
RI4 (Special treatment benefit)	.77	14.09	
Switching Costs (.80)			.82
SC1 (Loss of financial benefits)	.49	–	
SC2 (Actual financial expenses)	.66	8.86	
SC3 (Time and effort)	.92	10.02	
SC4 (Convenience loss and psychological cost)	.82	9.76	
Lack of Alternatives (.70)			.70
LA1 (Lack of alternatives' attractiveness)	.73	–	
LA2 (Lack of superior alternatives)	.62	9.81	
LA3 (Lack of availability of alternatives)	.63	9.84	

Note. Goodness-of-fit statistics: $\chi^2 = 323.81, df = 112, p < .001, \chi^2/df = 2.89, RMSEA = 0.07, CFI = .99, NFI = .98$

4) **Reliability and Validity Assessment:** The collected data were analyzed using SPSS and AMOS 5. First, EFA was conducted to assess the underlying factor structure of the scale items. The Bartlett's test of sphericity was found to be significant ($\chi^2 = 4666.36, p < .001$), and the value of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .91, indicating the adequateness of using the factor-analytic procedure. As expected, four factors with Eigen-values greater than 1 were extracted, accounting for 62.56% of the total variance. The first factor (preference) including 6 items explained 38.76% of the variance. The second factor (relational investment) containing 4 items captured 12.90% of the variance. The remaining two factors (switching costs and lack of alternatives) which explained about 10.90% of the variance contained 4 and 3 items respectively. Coefficient Alphas were computed to assess the internal consistency of items loaded to each factor. The values were greater or equal to .70 (Nunnally, 1978). Gerbing and Anderson's (1988) confirmatory factor analytic approach was used to assess unidimensionality, reliability, and validity of the scale. Prior to examining a second-order CFA model, analyzing its first-order model is usual (Lages, et al., 2005). Thus, a first-order CFA was first conducted. Table 1 provides a summary of the CFA results. The chi-square of this model was significant ($\chi^2 = 323.81, df = 112, p < .001, \chi^2/df = 2.89$) and the values of additional fit indices were acceptable (RMSEA = 0.07; CFI = .99; NFI = .98). In addition, the standardized loadings of each item on its intended construct were all significant, ranging from .49 to .92. The *t* value for each of the loadings ranged from 8.86 to 14.89, indicating all items were strongly associated with its respective latent factor. These findings provided evidence of unidimensionality. Convergent validity was established because all factors loadings are highly significant, and item squared multiple correlations, ranging from .24 to .85, were greater than .06 (Bagozzi & Yi, 1988). Composite reliability also exceeded .60 thresholds, suggesting measurement reliability (Bagozzi & Yi, 1988).

Figure 1
The switching barrier scale – CFA standardized coefficients for higher order model



Note. PF: Preference, RI: Relational Investment, SC: Switching Costs, LA: Lack of Alternatives.

5) **Higher Order Factor.** A second-order factor model of SBs was estimated. The model included four first-order factors and two dimensional higher order factors of SBs (see Figure 1). The model provided an acceptable fit of the data ($\chi^2 = 331.77$, $df = 113$, $p < .001$, $\chi^2/df = 2.94$, RMSEA = 0.07; CFI = .98; NFI = .98). Since all factor loadings for each first-order construct ($p < .001$) were significant and the relationships between endogenous factors and exogenous factors were significant, convergent validity of the second-order model was achieved (Kline, 1998). In addition, the results of chi-square difference test did not show a significant difference ($\Delta\chi^2(1) = 7.96$, $p > .001$), indicating the two models were not significantly different. Afterward, the proposed two factor higher order model (i.e., positive and negative SBs) was compared to the one common factor higher order model (i.e., SBs). While the general fit of the one common factor model was adequate ($\chi^2 = 372.16$, $df = 114$, $p < .001$, $\chi^2/df = 3.27$, RMSEA = 0.08; CFI = .98; NFI = .97), the chi-square difference test showed that the two factor higher order model was significantly better than the one factor higher order model ($\Delta\chi^2(1) = 40.39$, $p < .001$). These findings suggested that the specified two-factor higher order model provided a satisfactory representation of the observed findings. 6) **Nomological Validity:** Finally, nomological validity test was conducted to test the ability of the developed measure to predict a certain construct that should be theoretically able to predict (Churchill, 1979). There is a growing body of literature empirically supporting the relationship between SBs and revisit intentions (e.g., Jones et al., 2000; Vazquez-Carrasco & Foxall, 2006). The results of Structural Equation Modeling (SEM) ($\chi^2 = 558.83$, $df = 162$, $p < .001$; RMSEA = 0.08; CFI = 0.98; NFI = 0.97) showed that both positive (coefficient = .92, $t = 12.98$) and negative SBs (coefficient = .26, $t = 3.91$) had a significant impact on revisit intentions. These two components explained about 64% of the variance in revisit intentions. Therefore, nomological validity was supported.

DISCUSSION

The objective of this study was to develop a reliable and valid SB scale. This objective was achieved by following Maxwell's (2005) recommended guidelines for qualitative research and following Churchill (1979) and Gerbing and Anderson's (1988) exploratory and confirmatory factor analytic scale development procedures. This study has both theoretical and practical implications. First, the results of the unit of analysis and categorization revealed four major categories of SBs, particularly two positive and two negative SBs. The developed measurement scale involving these categories can be used to more accurately assess restaurant customers' perceived SBs and examine the roles of them in explaining downstream variables (e.g., commitment, retention, loyalty, and word-of-mouth). That is, the developed scale would stimulate additional research about SBs and integrative theory development, thereby increasing the understanding of restaurant customer post-purchase behaviors. From a practical perspective, since it was the first trial to identify SBs in the restaurant industry, the identified elements of SBs may enable restaurant marketers to understand inhibiting factors of customer switching more precisely and to develop better customer retention strategies. Second, the hierarchical structure of the SB scale also presents theoretical implications to restaurant and consumer behavior literature. Our empirical study provided support that second-order factors extracted the underlying commonality among first-order dimensions, reflecting an overall assessment of SBs that restaurant customers possibly perceive. This finding enhances the growing SB research literature by offering a hierarchical approach that explicitly recognizes and measures SBs. This hierarchical structure should be employed in extending the knowledge of SBs. Third, this study examined the roles of positive and negative SBs in explaining revisit intentions as a part of developing a measurement scale. Findings showed that both factors were significantly associated with revisit intentions and positive factor had a greater influence on revisit intentions than negative factor. These findings imply that it is best for restaurant operators to make every effort to prevent customer switching by increasing their focus more on providing affirmative reasons for the customer to return. For example, creating a warm and comfortable atmosphere, developing attractive menu design and special menu item, making visually appealing décor, providing reliable service/benefits, and treating all customers special would improve the customer's dining experience and make them want to return although their previous dining experiences were not fully satisfactory.

Despite best intentions, the present study has several limitations. First, while a majority of survey participants described their experiences within the last one month (65.90% for the first survey and 91.80% for the second survey), their service experiences may not be perfectly recallable. For future research, it is recommended to use restaurant customers in actual consumption situations as study samples to enhance internal/external validity of the study results. Another limitation lies in the samples. Components of SBs were identified based on the responses of members of two professional academic organizations and staff at a Midwestern university. They are important current/future restaurant customers, and they would describe their experiences more precisely when completing the

open-ended question. Yet, they do not represent all of those engaging in purchasing decisions in restaurants. In future studies, the use of a wider sampling range that better represents the population is recommended. Finally, since a major focus of this study was to develop a measurement scale of SBs, the relationships between the dimensions of the scale and antecedent/downstream variables (e.g., service performance, commitment, retention, or word-of-mouth behaviors) were not examined. Future studies may be needed to explore antecedents and outcomes of SBs and to develop a comprehensive model of SBs including such variables in a restaurant setting.

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**THE EFFECT OF FOOD SAFETY EDUCATION ON THE FOOD SAFETY KNOWLEDGE, ATTITUDES,
AND PRACTICES OF UNIVERSITY STUDENTS**

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ABSTRACT

Foodborne illness remains a major problem in the United States. Research regarding whether demographics, food safety education, certification, and work experience affect knowledge, attitudes, and practices towards food safety is on-going. This study evaluates whether food safety education, local health department requirements, and ServSafe certification affect the knowledge, attitudes, and practices of university students at one urban research institution. It found significant differences in all food safety education and ServSafe certification categories, but only in the knowledge area of local health department requirements.

Key Words: food safety education, university students, ServSafe

INTRODUCTION

The incidence of foodborne (FbI) infections caused by organisms such as *Listeria*, *Salmonella*, and *Escherichia Coli* 0157 has declined since 1999. However, the Center for Disease Control (CDC) notes that “further efforts are needed to sustain these declines and to improve prevention of food infections” (Center for Disease Control, 2005, p. 1). From August 2006 – May 2007, 628 cases of salmonella were attributed to peanut butter produced at a single facility in Georgia (CDC, 2007), while in September 2006 at least 123 people contracted cases of e-coli from uncooked fresh bagged spinach, resulting in a major product recall. These outbreaks illustrate the need for continuous employee and consumer education regarding food safety practices.

College students may participate in risky behavior, such as alcohol and drug abuse, unprotected sexual behavior, and dangerous physical activity. Morrone and Rathbun (2003) investigated students at one large state university and found that they had “engaged in food safety behaviors that place them at greater risk for illness than members of the general population” (p. 12). Therefore, they represent an important group to study regarding their food safety knowledge, attitudes, and practices

The continued prevalence of FbI, the special characteristics of university students, and the mixed results of previous studies illustrate the need for continued research of these topics. This article reports on a portion of a study that utilized a modified version of Unklesbay, Sneed, and Toma’s (1998) survey to evaluate the effect of demographic factors, college majors, amount of food safety work experience, and amount of food safety education on their knowledge, attitudes, and practices towards food safety.

LITERATURE REVIEW

Patil, Cates, and Morales (2005) performed a meta-analysis of 20 studies published since 1992 that included information regarding consumption of raw or undercooked animal products, knowledge of practices such as good hygiene, prevention of cross-contamination, and proper cooking practices, actual practices in those areas, and specific demographic questions. The key finding of this study was that all classes of consumer knowledge of safe handling practices did not correspond with the use of these practices (p. 1887). Meer and Misner (2000) discovered that participants in a USDA Food and Nutrition Education program with previous food safety education

scored higher than those without it on 11 food safety knowledge questions, although there were no significant differences in their practices.

Research has found similar patterns among foodservice employees. Hertzman and Barrash (2007) administered food safety questionnaires to catering employees performing cooking and service duties during on- and off-premise catering events. They found that there was no correlation between food safety knowledge and behavior. Angelillo, Viggiani, Rizzo, and Bianco (2000) reported that although food handlers had good attitudes towards FbI prevention and control, they lacked basic knowledge about foodborne pathogens and their transmission vehicles and did not exhibit proper practices when handling raw foods.

Other studies have focused specifically on the college student population. Along with having a higher propensity for risky behavior (Morrone & Rathbun, 2003), college students' food safety behaviors can affect others due to the large number employed in the foodservice industry. Unklesbay, Sneed, and Toma (1998) found that college students in dietetics, food science, nutrition, and health programs had significantly higher scores for attitude, practice, and knowledge of food safety than students in other disciplines. In continued studies, Lin and Sneed (2005) found that student employees of university foodservice who had the benefit of food safety classes demonstrated better knowledge of safety issues as well as better practices in that regard and that employees with higher attitude scores also had higher practices scores. Garayoa, Cordoba, Garcia-Jalon, Sanchez-Villegas, and Vitas (2005) observed a significant positive relationship between the amount of food safety education and students' knowledge of pathogens and other food safety. However, their higher levels of knowledge did not create higher levels of safe practices.

All foodhandlers in this study's location must have a valid "Health Card" issued by the local health district. To obtain this card, or renew it, one must obtain a Hepatitis A vaccine and watch a one-hour food safety video (Southern Nevada Health District, 2007). The video includes segments on Introduction to Food Safety, Overview of Foodborne Microorganisms, Personal Hygiene, Purchasing, Receiving, Storage, Preparation, Cooking, Serving and Facilities Cleaning and Sanitizing.

The National Restaurant Association Educational Foundation (NRAEF) sponsors the country's most prominent food safety training program – ServSafe. To receive certification for five years, a 90-question exam must be passed with a score of 75% or higher. Several studies have verified the extent of using ServSafe and its contributions to increased food safety knowledge. Schilling, O'Connor, and Hendrickson (2003) concluded that of 16 states with state-mandated food safety certification requirements for restaurants, 14 used the ServSafe program (p. ii). Ravel-Nelson and Smith (1999) performed research in Philadelphia where at least one employee per restaurant must be ServSafe certified. They discovered that on a 13 question quiz derived from ServSafe, each question was answered correctly more frequently by those employees with certification than those without.

RESEARCH QUESTIONS

The goal of this study was to investigate whether demographic factors, amount of foodservice work experience, and amount and type of food safety education affect the food safety knowledge, attitudes, and practices of university students. This article reports on the findings concerning the following specific research questions:

1. What are the general knowledge, attitudes, and practices of university students regarding food safety?
2. Is there a significant difference in university students' food safety knowledge, attitudes, and practices based on their level of food safety education, receiving local health card training, and/or receiving ServSafe certification?

METHODOLOGY

Population and Sampling Frame

The population for this study was undergraduate students at a metropolitan university in the Southwest U.S. The university's student body and programs are very diverse and the school is located in a premier resort and culinary destination. Students in the hotel administration and nutrition sciences degree programs must take a one-credit Foodservice Sanitation course and pass the NRAEF ServSafe examination as a graduation requirement. In addition, a large percentage of students from all disciplines work in the foodservice industry and therefore must

obtain the county Health Card. Therefore, the researchers considered that the population would be appropriate to analyze how the level of foodservice education affects food safety knowledge, attitudes, and behaviors.

The investigators used elements of convenience and stratified sampling techniques to identify class sections in which to administer surveys. They targeted introductory classes in hospitality, biology, and history and upper-division hospitality and business classes that would have students from all majors and class standings. The specific classes surveyed depended on the researchers' personal contact with the course instructors and the instructors' willingness to allow class time for the students to complete the questionnaire.

Instrument

With permission of Dr. Jeannie Sneed, the majority of the survey instrument used questions from her previously validated survey first reported in Unklesbay, Sneed, and Toma (1998). The knowledge section was modified slightly to incorporate recent changes in proper food temperatures and handling procedures. It asked students to answer 15 true-false questions. The attitude section asked students to respond to 15 statements on a five-point Likert-type scale from Strongly Disagree (1) to Strongly Agree (5). The practices section asked students to state how often they followed certain practices on a four-point Likert-type scale from Never (1) to Always (4). The final section contained demographic questions as well as what type of food safety education the respondents had earned, and whether they had current county Health Cards and/or NRA ServSafe certificates.

DATA ANALYSIS AND DISCUSSION

Response Rate

The survey was distributed in 21 classes to 1264 students. The researchers received 992 completed surveys for an overall response rate of 78.48%. The researchers discarded 37 surveys where respondents had not filled out the demographic, knowledge, and/or practices sections completely. Therefore, 955 surveys were analyzed for a valid response rate of 75.6%.

Demographics

The majority of the respondents (62.5%) were female and 37.5% were male. Their age ranged from 16 to 65 years, with a mean age of 22 years old. The respondents represent thirty-six majors from ten colleges. For data analysis, the researchers formed three groups representing various fields of study: Hotel (57.2%); Science – (Science, Health Science, and Engineering - 20.1%); and Other – (Business, Education, Fine Arts, Liberal Arts, Urban Affairs, and University Studies- 22.7%).

Thirty percent of the participants stated they had received no food safety education. Over 26% had taken a college course, while 24.3% had received on-the-job training (OJT). Over 15% had a college course and OJT. The remainder had participated in other types of food safety training, such as military or high school courses or some combination of other courses and OJT and college courses. Three hundred sixty-one students (37.8%) reported having a current county Health Card. Two hundred eighty participants (28.8%) reported having a current ServSafe certificate.

Overall Results

The participants' incorrect answers to the true-false knowledge statements were scored 0 and the correct responses scored 1. The researchers calculated the percentage of correct responses for each statement (Table 1). Over 70% of the participants gave correct answers to 13 out of the 15 questions. The two questions with only slightly more than half correct responses referred to specific food temperature requirements.

The participants' responses to the fifteen questions on food safety attitudes ranged from 1 (Strongly Disagree) to 5 (Strongly Agree). A higher mean was indicative of a greater concern for food safety. The overall means were greater than 4 for 8 statements and greater than 3 for the remaining 7 statements (Table 2). Three of the statements with lower means could be considered controversial areas relating to chemicals, preservatives, and irradiation. However, lower means on the two statements regarding increased food safety education indicate that the participants may feel there are already adequate food safety education opportunities. The Cronbach Alpha for this section was .816 indicating that the statements were reliable indications of the construct.

The participants' responses for ten statements regarding food safety practices ranged from 1 (Never) to 4 (Always). Practices with higher means indicate that respondents perform them more frequently (Table 3). Practices with the highest means were discarding food past its expiration date and washing fruits and vegetables before eating or preparing them. The Cronbach Alpha for this section was .728.

Table 1
Overall Knowledge Scores – Number and Percent of Correct Answers

Statement	n	Percent
It is okay to serve a cooked steak on the same plate that held raw steak without washing the plate.	902	94.5
Soaking vegetables in cold water will completely remove any pesticides, bacteria, and viruses.	885	92.7
Refrigeration completely stops the growth of microorganisms.	868	90.9
You should wash your hands with hot, soapy water for 20 seconds before preparing food.	863	90.4
E-coli 0157:H7 in undercooked meat could cause death.	838	87.7
After meat or poultry has been cooked, it is safe to leave it at room temp.	787	82.4
Wearing clean gloves is a substitute for hand washing.	783	82
Hot foods should be held at a temperature of 135° F or above.	765	80.1
Raw chicken should be stored below cooked foods in the refrigerator.	761	79.7
The elderly are more likely to get FbI than are teenagers.	704	73.7
Unsafe foods can always be identified by the way they look and smell.	702	73.5
Children are more likely to get FbI than adults are.	690	72.3
Raw seafood seldom possesses risk of causing FbI.	687	71.9
Cold foods should be kept in a refrigerator at 50° F.	524	54.9
If leftover foods are reheated to 145° F, they are safe to eat	487	51

Note: N = 955

Table 2
Overall Attitude Means

Statement	Mean	SD
I think food service establishments should educate their employees on proper sanitation.	4.85	.542
It is the responsibility of restaurant management to ensure the food served is safe to eat	4.71	.673
The health department should ensure food safety and sanitation.	4.69	.676
I believe that everyone should be concerned about food safety.	4.56	.741
Food safety is an important issue to me.	4.30	.861
I believe that my decisions and actions impact my risk for FbI.	4.12	.923
It is the government's responsibility to ensure that food is safe to eat.	4.01	1.01
I am responsible for making sure the foods I eat are safe.	4.00	.938
Pesticides used on vegetables pose health risks.	3.90	.897
The use of chemicals and preservatives in food processing poses risks for consumers.	3.80	.931
I think more classes about food safety should be available to consumers.	3.79	.896
I want to learn more about food safety.	3.61	.994
I believe that foodborne illnesses are common.	3.55	.948
Eating at restaurants has a greater risk of FbI than eating at home.	3.23	1.12
Irradiation makes food safer to eat.	3.17	.716

Scale: 1(Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), 5 (Strongly Agree)

Table 3
Overall Practices Means

Statement	Mean	SD
I wash fruits and vegetables before eating or preparing them.	3.64	.608
I discard food that is past its expiration date.	3.61	.575
I serve foods immediately after they are cooked.	3.47	.763
I wash cutting boards and knives in between cutting different food products, such as vegetables and chicken.	3.42	.543
I follow label instructions for storing and preparing packaged foods.	3.33	.734
I refrigerate leftovers immediately after a meal is eaten.	3.28	.716
I heat leftover foods, such as spaghetti, to 165° F before serving them.	3.01	.793
I select a restaurant based on its reputation for good sanitation and cleanliness	2.73	.875
In restaurants, I ask to speak to a mgr when dishes or utensils are dirty.	2.21	.991
I check the temperatures of my refrigerator and freezer.	2.17	.944

Scale: 1 (Never), 2 (Seldom), 3 (Usually), 4 (Always)

ANOVA

The researchers performed analysis of variance (ANOVA) to determine whether significant differences existed in the knowledge, attitudes, and practices of students based on their level of food safety education. The researchers found significant differences at the $p < .05$ level for 6 knowledge questions, 5 attitudes statements, and 2 practices statements (Table 4).

Table 4
Significant Differences based on Level of Food Safety Education

Statement	Between Groups Mean Sq	F	Sig
Knowledge			
Children are more likely to get FbI	1.72	9.12	.000
Hot foods should be held at 135 ° F for service	.327	2.14	.041
Wash hands with hot soapy H2O for 20 seconds before preparing food	.23	2.77	.007
The elderly are more likely to get FbI	1.85	10.3	.000
Cold foods should be kept at 50°F	2.56	11.1	.000
Raw chicken should be stored below cooked foods	1.06	6.93	.000
Attitudes			
Foodservice establishments should educate employees on sanitation	.756	2.6	.012
The health dept should ensure food safety and sanitation	1.12	2.48	.016
Everyone should be concerned about food safety	1.41	2.6	.012
More classes/seminars should be available for consumers	3.29	4.2	.000
I want to learn more about food safety	4.10	4.26	.000
Practices			
I heat leftovers to 165°F before serving	1.66	2.68	.009
I eat raw or undercooked foods	1.07	4.67	.000

Notes: Df between groups is 7 for all statements

The researchers conducted post-hoc Tukey tests to determine between which pairs of education levels the significant differences existed. For the knowledge questions regarding hot food holding temperatures and hand washing, the only significant differences were between those with only on-the-job (OJT) training and those with OJT and college courses (CC). For the other questions, there were significant differences between those groups, as

well as between participants with no food safety training and CC, none and OJT and CC, and OJT and CC. In all cases the mean was higher for those groups with CC or with both OJT and CC.

For the attitudes statements, there were significant differences between respondents with no food safety education and CC for all but the statement regarding concern for food safety. For that statement, the only significant difference was between the group with other types of food safety education and those with OJT and CC. In addition, the respondents with CC and with OJT and CC were more likely to believe that more food safety classes/seminars should be available to consumers. Students with CC were also more likely than those with OJT to state that they personally wanted to learn more about food safety.

The pairwise combination contributing to the significant difference in the practice of heating leftovers was students with a CC having a mean of 3.12 versus those with OJT having a mean of 2.88. The differences regarding eating raw and undercooked foods were again between those respondents with no food safety education and those with CC and OJT and CC. In this case, students with no food safety education ate raw foods less than the other groups.

T-Tests

The researchers performed t-tests to determine whether there were significant differences based on whether the participant had a current Health Card or current ServSafe Certificate. Students with a Health Card scored significantly higher on four statements at the $p < .05$ level in the knowledge area, but not on attitudes and practices. The statements with differences and their two-tailed significances were: children are more likely to get FbI (.018), cold foods should be kept at 50° F (.026), gloves substitute for hand washing (.012), and raw chicken should be stored below cooked foods (.000).

For the ServSafe Certificate there were significant differences in all areas (Table 5). The t-statistics, degrees of freedom, and significance levels for both sets of t-tests were adjusted where necessary for variables that did not meet the Levene statistic for the assumption of homogeneity of variance.

IMPLICATIONS

Although their raw data were unavailable, this study provides some interesting comparisons to Unkelsbay, Sneed, and Toma's (1998) original study performed 10 years ago. Despite increased government, education, and media attention informing consumers about food safety issues, the percentage of current participants answering the knowledge questions correctly was within three percentage points of the Unkelsbay et al.'s respondents on six of the questions, lower than three percentage points on four of questions, and substantially higher for current participants (73.5% versus 57%) on only one question (whether unsafe foods can be identified by the way they smell and look). However, the current participants had higher attitude means on 11 of the 15 statements. Their reported means were lower for the statements regarding whether it is government's responsibility to ensure safe foods, their decisions and actions impact their risk of FbI, more consumer food safety classes should be available, and they wanted to learn more about food safety. In addition, these students appeared to have an increased willingness to follow proper food safety practices as those means were higher than the original study for all statements.

Analysis of Variance showed that significant differences existed between those with no food safety education and other groups for several of the knowledge, attitudes, and practices statements. It also indicated that although OJT can increase knowledge, attitudes, and practices, college courses or the combination of college courses and OJT appear to be more effective in increasing the means in those areas. ServSafe certification proved to have the most influence on knowledge, attitudes, and behaviors. Although the respondents were not overly enthusiastic about the need for more food safety training, government officials and food safety organizations should evaluate methods used to disseminate effectively, food safety education to the public, while educators should consider how to incorporate food safety information into course requirements for all majors. Feinstein, Dalbor, and McManus (2007) found that computer and web-based food safety training increased scores on the ServSafe exam. Technology-based education formats, therefore, may be one method to increase accessibility to food safety training. T-tests revealed that the Health Card program effectively increases knowledge in a small number of knowledge areas, but not for attitudes and practices. Local health officials should analyze whether this training can be changed to improve knowledge in more areas.

Table 5
Significant Differences based on ServSafe Certificate

Statement	Certif Mean	No Certif Mean	T	Df	Sig. (2- tailed)
Knowledge					
*Cooked meats/poultry can be left at room temp	.92	.78	6.165	770.96	.000
*Refrigeration stops the growth of microorganism	.94	.90	2.015	622.55	.044
*Children are more likely to get FbI	.87	.67	7.612	707.28	.000
* Wash hands with hot soapy H2O for 20 seconds					
before preparing food	.86	.93	-2.829	404.84	.005
*Leftovers should be reheated to 145° F	.61	.47	3.892	521.53	.000
* Its OK to serve cooked steak on the same plate that					
held raw steak without washing it	.97	.94	2.421	722.99	.016
* The elderly are more likely to get FbI	.89	.68	7.83	738.73	.000
*Cold foods should be kept at 50°F	.73	.48	7.647	566.47	.000
*Gloves substitute for hand washing	.88	.8	3.112	615.07	.002
*Raw chicken should be stored below cooked foods	.94	.74	8.732	865.88	.000
Attitudes					
My decisions/actions impact my FbI risk	4.25	4.07	2.71	947	.007
*Food safety is an important issue for me	4.43	4.26	2.956	582.68	.003
*More classes/seminars about food safety should be					
available for consumers	4.04	3.69	5.903	552.19	.000
I want to learn more about food safety	3.85	3.52	4.58*	945	.000
*I am responsible for making sure the foods I eat are					
safe	4.13	3.96	2.929	621.21	.004
I believe that FbI are common	3.69	3.49	2.943	943	.003
Chemicals and preservatives pose risks	3.92	3.75	2.506	945	.012
* Irradiation makes food safer to eat	3.26	3.13	2.362	410.48	.019
Practices					
*I wash cutting boards/knives between cutting					
different food products	3.54	3.44	2.084	581.22	.038
I heat leftovers to 165°F before serving	3.11	2.97	2.468	945	.014
*I eat raw or undercooked foods					
(Scale: 0(no) 1 (yes))	.72	.58	4.15	945	.000

Note: * indicates characteristics for which unequal variances were assumed and adjusted values were used.

As with most of the previous studies cited, this project found that although various types of food safety education can increase some types of food safety knowledge, most participants failed to recognize proper temperatures for food preparation, service, and reheating. Since that is an essential part of controlling FbI, all types of food safety education must emphasize that area.

This study also corroborated the mixed efficacy of increased food safety knowledge and education on changing attitudes, and particularly practices. All parties involved in food safety should focus on evaluating the potential barriers to changing attitudes and practices and how to overcome those obstacles.

LIMITATIONS, FUTURE RESEARCH, AND CONCLUSION

This study was limited by the sampling method used. Only students who attended classes on the day the instruments were administered were included in the sample. Also, due to unequal numbers of respondents in the various categories of independent variables, many of the statistics had to be adjusted because they did not meet Levene's statistic for the homogeneity of variance. In addition, the study is limited because responses were self-reported. Especially for the practices area, observational research, such as used by Hertzman and Barrash (2007), may be more appropriate, but that type of study is constrained by reliability challenges.

This study was conducted in the Fall 2007 semester. This article discusses only a portion of the data collected. The researchers plan to conduct further data analysis to determine whether significant differences exist based on field of study, class, international student status, and amount of work experience. Factor analysis will be performed to investigate groupings of dependent variables within the categories of knowledge, attitudes, and practices. Regression analysis will be used to determine whether a predictive relationship can be established between the independent and dependent variables.

This project showed that significant differences existed in food safety knowledge, attitudes, and behaviors based on the amount of foodservice education and ServSafe certification and in the knowledge area based on local health department requirements. Until FbI outbreaks can be reduced to minimal levels, it is essential to continue studying various populations and evaluating different characteristics of people and programs to find methods to elevate knowledge of all food safety topics to a higher level and to ensure more substantial and consistent links between increased knowledge and improved attitudes and behaviors.

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DEVELOPING AND VALIDATING A MODEL FOR EVALUATING THE QUALITY OF UNDERGRADUATE HOSPITALITY, TOURISM, AND LEISURE PROGRAMS

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ABSTRACT

A model for measuring the quality of undergraduate programs in hospitality, tourism and leisure was developed and empirically cross-validated. This study carried out document analysis, three focus groups and content validity to develop the framework and items of Quality Model for Hospitality, Tourism and Leisure Programs (QMHTLP). Survey responses from 430 full-time teachers were used to verify QMHTLP *via* exploratory and higher-order confirmatory factor analysis. Seven standards and 16 dimensions were identified through an instrument-development process. The 7 standards, in terms of relative importance, are concerned with: curriculum, teaching and learning, faculty, strategic planning, students, administrative management, and resources.

Key Words: education quality; undergraduate programs; hospitality; tourism; leisure

INTRODUCTION

Taiwan has experienced rapid growth in the number of undergraduate hospitality, tourism and leisure programs (HTLPs) since 1998. The number is still rising (Department of Statistics, 2007). However, in the increase in the number of both universities and undergraduate programs throughout the world has imposed a great financial burden on governments, and this has led to problems with quality control in education (Horng, Teng, Lee, & Liu, 2006). Thus the need for evaluating these programs accurately and equably has become ever more important, in Taiwan and in the world as a whole.

Quality has many dimensions (Harvey & Green, 1993). Very broadly, educational quality refers to the input, processing and output of an educational system and the service the system provides to fulfill stakeholders' expectations (Cheng & Tam, 1997). One of the most effective measures for improving educational quality is evaluation/accreditation. The purpose of educational evaluation is to determine value and identify strong points and benefits, and so standards or indicators are very important (Fitz-Gibbon, 1996). Educational evaluation/accreditation should be carried out in accordance with valid, relevant, measurable and manageable indicators.

There is a lack of both theory and empirical evidence regarding the validity of quality indicators for success in higher educational institutions (Kwan & Walker, 2003). Moreover, there is little research on quality indicators for HTLPs. Cameron and Whetten (1983) indicate the complexity of higher education, its multidimensional nature, which makes it very hard to evaluate and measure. In addition, it is difficult to define educational constructs such as "quality" and "effectiveness" (Kwan & Walker, 2003), so there has been little empirical investigation of educational quality (Winn & Cameron, 1998). Law and Chon (2007) have emphasized the importance of establishing a holistic and comprehensive evaluation system for academic research performance in hospitality and tourism education. Thus it is particularly clear at this time that HTLPs need a more precise evaluation instrument.

In its 2001 "University Education Policy Whitepaper," the Ministry of Education stated that Taiwan needs to do research on developing an evaluation system for higher education programs. Given the differences among specialized academic areas or programs, evaluation systems need to be very program-specific. However, since there are still no quality indicators or quality assessment tools for HTLPs in Taiwan, the quality of the HTLPs cannot be ensured and effectively evaluated. Relatively, international HTLP evaluation/accreditation has been in place for

decades. For examples, the British Quality Assurance Agency (QAA) grouped hospitality, tourism and leisure education together as one subject and started to review program quality through a HLRS&T (Hospitality, Leisure, Recreation, Sports and Tourism) subject reviewing process. The Accreditation Commission for Programs in Hospitality Administration (ACPHA) in the US, which adopted an accreditation system to assure the quality of hospitality education at universities and colleges (CHRIE, 2003). The Themis Foundation, under the auspices of UNTWO, established TedQual and its quality indicators in order to enhance the quality and efficiency of tourism education and training programs (UNWTO, 2006). Furthermore, the National Recreation and Park Association (NRPA) has adopted a certification system, and four-year undergraduate programs concerned with park, recreation and leisure services can apply for certification (NRPA, 2007). Above examples may be seen as efforts to advance the quality of HTLPs *via* evaluation/accreditation procedures.

This study, then, has two purposes: (1) to develop a Quality Model of Hospitality, Tourism and Leisure Programs, or QMHTLP and (2) to verify the validity and feasibility of this QMHTLP. The researchers used both qualitative and quantitative methodologies and considered the opinions of key stakeholders' (including program heads, faculty, industrial practitioners, educational evaluation experts, and government representatives) in order to construct quality indicators and a general quality model for hospitality, tourism and leisure undergraduate programs.

METHODOLOGY

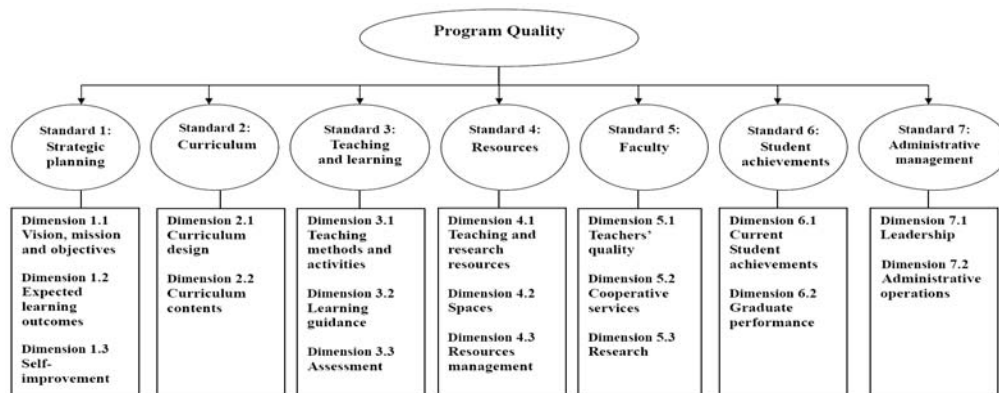
Research framework

The construction of a conception of "program quality" for HTLPs will be guided by the results of a literature review, focus groups and research team discussions. The researchers conducted an integrated analysis of the standards and indicators in the accreditation/evaluation systems of the ACPHA, TedQual, NRPA, and HLRS&T subject reviews, in order to form a preliminary quality framework (see Figure 1).

Constructs

Quality is a construct in that it is a latent variable that cannot be directly measured. However, a construct can be indirectly measured and inferred through its manifestations (Rao, Solis & Raghunathan, 1999). In Figure 1, the top level (higher-order construct) is "program quality"; in the middle (first-order factors) are the seven constructs (also referred to as standards) that constitute the quality of a program, including (1) Strategic Planning, (2) Curriculum, (3) Teaching and Learning, (4) Resources, (5) Faculty, (6) Student Achievements, and (7) Administrative Management. At the bottom (observed variables) are the 18 dimensions that comprise the seven quality standards.

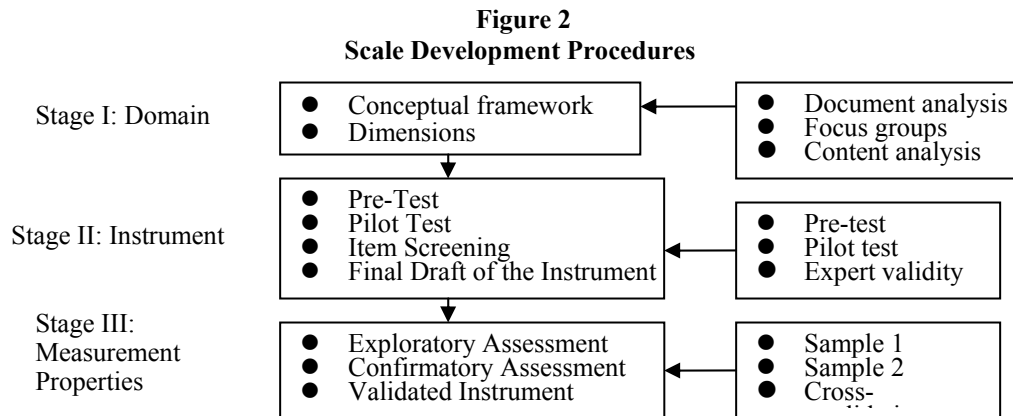
Figure 1
Preliminary Quality Framework for HTLPs



In the Preliminary Quality Framework, the higher-order construct integrates major factors of a program's quality. Besides, each factor (standard) has incorporated the idea of "Context-Input- Process-Output." The dimensions within each standard are intercorrelated, and the standards share a significant amount of variance, which is captured by the higher-order construct. Accordingly, the present study used this framework to develop a systematic and holistic model that incorporates the multidimensional quality of HTLPs.

Model development and validation procedures

This study adopted scale development procedures (Lewis, Templeton, & Byrd, 2005) to develop and validate QMHTLP. This method comprises three stages as Figure 2.



FINDINGS AND ANALYSES

Stage I: Domain specification and item generation

The first stage of this study is to develop the preliminary quality framework, its underlying dimensions, and generated indicators (item statements) for each dimension of the HTLPs. First, document analysis was used through collecting information from government publications, journals, HTLP accreditation/evaluation handbooks and their official websites (i.e., ACPHA, TedQual, NRPA, and QAA's HLRS&T websites). Next, the research team working on this project drafted a total of 99 indicators which could be used as a reference by follow-up focus group discussions. Second, this study sponsored three separate focus groups in the north, center and south of Taiwan. Comments and suggestions were invited to refine the quality indicators. Participants included educational evaluation experts, directors of HTLPs with review experience, industrial managers and government representatives. A total of 37 experts participated in the review of the quality indicators of this HTLP framework.

To retain information validity, all three focus group discussions were recorded and transcribed verbatim. The researchers began a content analysis of the discussions and identified disparities between the preliminary framework and expert opinions in order to further modify the quality standards and indicators. The research team went over the results of the content analysis and reduced the number of indicators from 99 to 91 by rephrasing, consolidating and deleting original statements.

Stage II: Instrument construction

In the second stage, item statements in each dimension were converted into items on the instrument. This study employed a pretest, pilot test and expert validity test to further modify and confirm the items of the QMHTLP.

1. Pre-test

The first draft of the self-assessment questionnaire, based on the quality indicators of the preliminary framework, was presented to two HTLP program directors who had participated in program evaluation. They were requested to provide feedback on the questionnaire. At this stage, changes were made in item wording but all the items remained in the questionnaire.

2. Pilot test, expert validity, and item screening

Following revisions in the pre-test, the questionnaire with its 91 items was appraised via pilot test to purify the instrument. Respondents were asked to rate their own "program's quality" on a scale from 1 to 5, with 1 meaning "strongly disagree" and 5 "strongly agree". Besides, this study added one box to the scale, N/A, which means "not applicable".

In December 2006, this study conducted a pilot test with HTLP instructors and collected 53 questionnaires to analyze. At this stage, two tasks were performed: (1) based on the questionnaire responses, items that were often unanswered or often felt to be difficult to answer were deleted; (2) the retained items then underwent corrected item-total correlation (value over 0.40) and internal consistency analysis (Cronbach's $\alpha > 0.70$) (Nunnally, 1978). This step is used to screen the items on the instrument (Lewis et al., 2005). This study took out 10 items and thus reduced the total to 81.

Furthermore, three HTLP professors from the UK and US who are familiar with HTLP accreditation and evaluation (two of them once served as program directors) were invited to certify the instrument's validity. Following their suggestions, the research team decided to remove eight items that were difficult to answer and added a new item. The finalized questionnaire consists of 74 items in total.

Stage III: Evaluation of measurement properties

Following a strategy of method triangulation, both exploratory and confirmatory techniques were applied sequentially to different samples in order to assess the reliability and conduct cross-validation for QMHTLP. The study used data collected from hospitality programs as in Sample 1, and data collected from tourism and leisure programs as in Sample 2.

1. Data collection (Sample 1)

In order to purify the instrument, this study conducted a questionnaire survey with respondents who were full-time instructors employed more than a year in their hospitality management programs. Then 355 questionnaires were distributed, of which 197 were returned. Of the returned questionnaires, 13 were invalid because of incomplete responses. Thus a total of 184 valid questionnaires were obtained, yielding a valid return rate of 51.8%.

2. Item reduction and exploratory factor analysis (EFA)

This study conducted EFA on Sample 1 ($N = 184$) in two steps. Following the suggestion of Hair et al. (2006), it used principal axis factoring with a fixed number of factors, in conjunction with oblique rotation, in order to extract factors from each quality standard. Items with a factor loading over 0.40 were kept. However, items with cross-loading were found in five items (including numbers 4, 9, 23, 34, and 68). Following the example of Conway & Huffcutt (2003), the five items were removed.

In the second step, this study conducted the second EFA on the remaining 69 items using the same method. The results showed that the factor loading of each item was greater than 0.40. As for the number of dimensions, the three dimensions under "Teaching and Learning" and "Faculty" were consolidated into two while the other dimensions, coming under the rest of the standards, remained unchanged. Accordingly, the model retained 7 standards and 16 dimensions. Further, the explained variance of each standard in QMHTLP ranges from 59.60% to 76.16%. In terms of construct reliability, the Cronbach's α values of each standard range from 0.81 to 0.94, which indicates that first-order constructs in QMHTLP have good internal consistency.

3. Data collection (Sample 2)

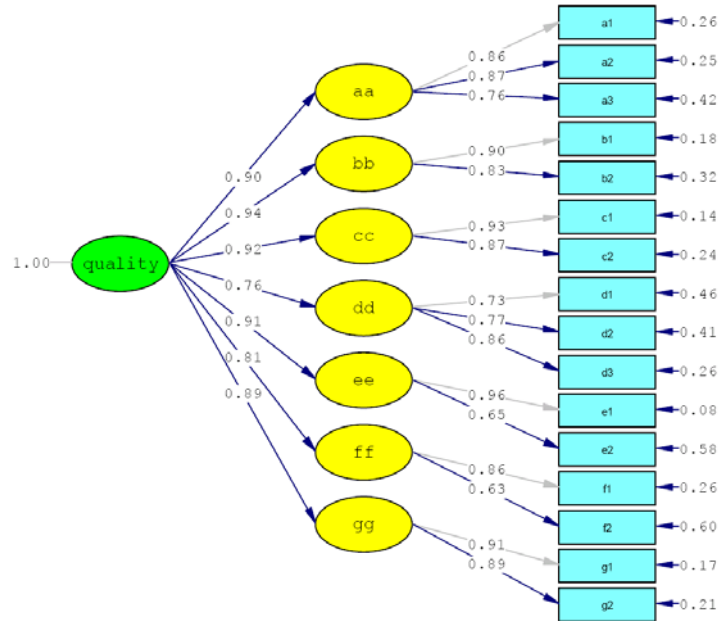
This study further performed second-order CFA on Sample 2 ($N = 246$) to find out the stability of the relationship between measurement variables in QMHTLP (Lewis et al., 2005). To collect data for Sample 2, questionnaires were distributed to full-time instructors employed more than a year in their tourism and leisure management programs. Survey procedures similar to those used with Sample 1 were employed. In total, 246 valid questionnaires were obtained, which meant a valid return rate of 42.8%.

4. Reanalysis of proposed model via confirmatory factor analysis (CFA)

This study used the LISREL 8.80 software package and maximum likelihood method to perform a second-order CFA on Sample 2. A higher-order CFA was used because it is parsimonious and consistent with the assumption of multidimensional framework of QMHTLP. Given this assumption, the seven standards in QMHTLP represent first-order constructs, which share a common variance captured by a second-order construct (i.e., program quality). The 16 dimensions consisting of 69 items indicate measurement variables of corresponding latent constructs.

Figure 3 indicates the standardized solution results of using Sample 2 to examine QMHTLP. It was found that QMHTLP possesses good psychometric properties. The model also has good overall model-fit. The results of CFA showed that all goodness-of-fit indices are above acceptable standards; thus $\chi^2 = 215.80$, $df = 97$ ($p < 0.01$), $\chi^2/df = 2.22$, GFI = 0.90, CFI = 0.99, NFI = 0.98, NNFI = 0.98, PGFI = 0.64, RMSEA = 0.07, SRMR = 0.04. The cross-validation results of the new sample provide strong evidence that QMHTLP (with seven standards and 16 dimensions) is a theoretical model with good fit.

Figure 3
CFA Standardized Solution (Sample 2)



Note: quality = program quality (second-order construct); aa = program strategic planning, bb = curriculum, cc = teaching and learning, dd = resources, ee = faculty, ff = student achievements, gg = administrative management (seven first-order factors). a1, a2, a3 denote aa's three underlying dimensions; the same logic holds for the rest.

5. Fit of internal structure of model (Sample 2)

According to the CFA results, standardized factor loadings of underlying factors and measurement errors of the observed variables reached significant levels ($t > 1.96$, $\alpha = 0.05$), which indicates QMHTLP has good convergent validity (Fornell & Larcker, 1981). The evidence confirms that QMHTLP is a higher-order model, which indicates the discriminant validity existing among dimensions. Besides, correlations among the first-order factors are statistically significant but are not too close to 1.00, which indicates that the model has both convergent and discriminant validity (Smith, Milberg & Burke, 1996). Thus, CFA of Sample 2 supports the cross-validation of QMHTLP.

DISCUSSION AND CONCLUSIONS

QMHTLP explores factors that affect HTLP program quality by considering “input-process-output” procedures, and transforms these factors into tangible items that describe and assess the expected outcomes of an educational system. By using rigorous methodologies and adhering to the criteria of psychometrics, the study empirically supports the assumption that educational quality is a multidimensional construct.

The relative value attached to each of the QMHTLP dimensions by academics

The relative impact of each dimension on program quality is measured. The factor loadings (γ) of “program quality” relative to each first-order construct indicate the relative importance of each quality standard. The results show that each standard has a very high factor loading. Thus it is clear that, in the perception of HTLP instructors,

these seven quality standards all have a high weighting on a program's quality. Furthermore, Curriculum, Teaching and Learning, and Faculty are the dimensions that most strongly reflect the quality of HTLPs. The results confirm that curriculum quality, effective teaching and the enhancement of student learning outcomes are essential elements in the managing of education quality (Lumby, 2001). Moreover, the results are overall consistent with the core elements of international hospitality, tourism and leisure evaluation/accreditation systems. QMHTLP emphasizes that HTLP education and training should give priority to curricula and to the process of teaching and learning, in order to meet students' needs (QAA, 2000).

Respondents also believe that an HTLP's strategic planning and administrative management have an impact on its quality. Traditional educational evaluation theories do not emphasize strategic management or leadership, but QMHTLP considers these components as measurement variables. This confirms the core elements of a TQM-based educational quality framework, including leader commitment, strategic planning, and a self-improvement mechanism (Becket & Brookes, 2006). The dimensions of leadership and administrative operations are deemed part of the transformation process of a program, and this process will affect an organization's culture and overall quality.

The results have further shown that HTLP instructors do not put much weight on the dimension of student achievements. The reason for this result may lie in the importance of the system's perspective in this study. The present study has integrated the quality indicators of students' learning process into the dimensions of teaching and learning. Such a development may reduce the relative weight of the dimension of student achievements. However, students are the most important stakeholders in education. HTLPs should emphasize the evidence of student outcomes, and demonstrate what and how much has been improved according to the objectives of HTLPs.

Finally, the results show that the resources dimension is considered relatively less weighting among the seven standards. It may be attributed to the fact that HTLPs are practice-oriented, while students' learning activities are focused on hands-on experience. Since most HTLPs provide students with industrial internship opportunities, their internal resources may have less impact on the overall quality.

Practical implications of QMHTLP

This study has invited HTLP stakeholders to take part in the development of quality indicators and QMHTLP. For validation of QMHTLP, the study has adopted instructors' perspectives to reflect its concerns about HTLP education from different angles, which is in accordance with the principles of educational evaluation. Besides, the study has undertaken program self-assessment through the use of QMHTLP quality indicators. The results show that these quality indicators have high applicability and feasibility. QMHTLP is highly flexible, and so it allows HTLPs to retain their own features by developing curricula based on their goals and expected learning outcomes. QMHTLP can therefore serve as an important reference for both the internal and external evaluation of HTLPs. Moreover, because QMHTLP can reflect the multiple dimensions of educational quality, researchers or program directors can use it to assess HTLPs' overall quality and also its specific quality dimensions.

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**THE RELATIONSHIPS AMONG SERVICE QUALITY, IMAGE, AND LOYALTY IN HOTEL
INDUSTRY IN MAURITIUS**

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ABSTRACT

Despite the increasing importance of the hospitality industry and of the significance of image as a competitive factor, there is a paucity of research in hospitality literature providing conceptual and empirical studies considering service quality, image and customer loyalty together. Therefore, we examined the relationships among service quality, image, and loyalty in hotel industry in Mauritius. One thousand eight hundred (1800) questionnaires were handed out to the hotel guests and out of which 1450 useable responses were received, providing an 80% response rate. Our results indicate that image is influenced by service quality, and in turn it influences loyalty.

Key Words: service quality, image, loyalty, hotel, Mauritius

INTRODUCTION

Mauritius is now a well established high class tourist resort. Such reputation is largely due to the deliberate conduct of a selective tourism policy, to its natural beauty, and to the sense of hospitality of its inhabitants. Tourism is the main pillar of the Mauritian economy. Operating without any safety net (unlike the sugar and textile sectors), it stands well poised to be one of the main driving forces of the economy in the future, on the same lines as information technology. The traditional sun, sand and sea are now complemented with other attractions like personalized services, night life, high quality restaurants as well as organization of events based on themes. Modern tourism started in the 1950s and increased from 1,803 tourist arrivals in 1954 to 15,553 by 1968. In the first ten years of independence (1968-1978), a six-fold increase in tourist arrivals occurred, reaching over 108,000 in 1978 (Economic Intelligence Unit, 1991) and a peak of 128,000 in 1979. In 1980, the number of tourist arrivals was recorded at 166,600 with tourists spending around US \$110 million (Bank of Mauritius Statistics, 2000). In year 2000, twenty years later, tourist arrivals increased by 560 *percent*, to 656,453, and foreign exchange earnings increased by 430 *percent*, amounting to US\$ 475 million. Tourism receipts in 1980 represented 7.2 *percent* of the country's GNP as against 20.6 *percent* in 2000. According to the estimates of the Central Statistical office (2005) estimates, Mauritius will attract around 2,000,000 tourists by December 2020, thus generating a total of US \$0.5 billion. Mauritius has also been classified among the preferred destinations of residents of United Arabs Emirates and of the Middle Eastern countries tagged at the same status of the Maldives, Egypt, India and Australia (<http://www.mauritiustoday.com/news/articles>).

To further expand the tourism industry, 25,000 additional rooms will be required by 2015 to accommodate the increasing number of tourist arrivals. Hotel development was regarded as one of the main priorities of the government and has seen a dramatic increase from 43 in 1980 to 95 in 2006, with an overall growth rate of 182 *percent*. Attractive seafront locations of several existing hotels may offer opportunities for redevelopment in terms of infrastructure, management and operation. Also, the development of Mauritius as a regional business centre should give scope for the growth of business tourism. Mauritius is now on the global map for MICE activities and this new product category definitely contributes to the success of the existing business hotels. The development of high-class business hotels is an area with significant untapped potential given the strong growth of this lucrative

market segment. Mauritius is already the home to international hotel chains such as Hilton, Maritim, Meridien, Accor, Oberoi, Taj, Mövenpick, Four Seasons, Club Med and One & Only Le Touessrok, among others.

However, hotels in Mauritius have faced a difficult environment due to changing customer demands and internal competition since 1990s. In response there has been an expansion in the construction of coastal hotels in Mauritius to cope with increasing customer demand. Together with this expansion, hotels are now focusing upon issues of service quality to maintain their ethos in the country's image as a "high-quality" holiday destination (Sun International, 1998). However, despite the rhetoric, anecdotal evidence suggests that tourists staying in different grades of hotels in Mauritius have experienced shortfalls in the quality of service offered during the 1990s. International tourists have also understandably expressed varied needs and expectations during their hotel stay but hotels in Mauritius have not responded adequately to these requirements (Ministry of Tourism, Mauritius, 1988). In line with these complaints from tourists, the Ministry of Tourism and Leisure (1999) conducted a survey of outgoing tourists and results obtained further revealed the need to improve the service quality in hotels of Mauritius.

The growth and development of hospitality services play an important role to tourism industry in Mauritius. Hospitality firms compete on the basis of services provided, and not on the basis of physical products (Gronroos, 2000). The competitive advantage of the service component within the hospitality offer has become increasingly evident as customers increasingly perceive little to differentiate between the myriad of comparable hospitality firms' product offerings. Therefore almost all hospitality firms gain market leadership by providing superior quality of service in-order to gain customer satisfaction. In tandem with the governmental attempts to promote Mauritius, the hotel industry has also contributed by embracing the idea of 'quality management' and initiating various programs to improve the quality of service to meet with international hotel standards (Nield and Kozak, 1999; Ministry of Tourism, 1998). Some hotels have already been accredited with the ISO 9000 certification and others are striving towards achievement of this goal (Sun Resorts, 1996). The role of service quality in the success of hospitality businesses cannot be denied. While managers believe it is important to provide high service quality, the real goal of all hospitality firms is to enhance loyalty of its present customers and its subsequent effect on attracting new customers.

It is now evident that for the long term success of hospitality firms' customer loyalty is significantly more important than customer satisfaction (Kandampully and Suhartanto 2000; 2003). In addition, recent literature identifies that a firms' image in the marketplace has a significant influence on customer loyalty (Darley and Lim, 1999). As services consist primarily of intangible properties, firms' image may be used to reduce perceived risk and to influence frequently unobservable extension evaluation criteria, such as credibility, quality and eventually customer patronage intentions (Keller and Aaker, 1997). Researchers also point out the need for developing models that can capture the updating mechanism of firms' image in response to marketing activities to gain customer loyalty (Keller, 2003). Corporate image is identified by many managers as an important factor to maintain a relatively high score rating among loyal customers. Despite the increasing importance of the hospitality industry and of the significance of corporate image as a competitive factor, there is a paucity of research in hospitality literature providing conceptual and empirical studies considering service quality, corporate image and customer loyalty together. Thus, discussions on the interrelationships between service quality, corporate image and the mechanism by which they jointly influence customer loyalty can be of major interest to hospitality firms and researchers. Thus, this study finding clearly adds new knowledge to the present body of hospitality literature and will assist practicing managers by providing an integrated model.

LITERATURE REVIEW

Service Quality

Service quality is generally viewed as an overall evaluation of the service provided (Taylor and Baker, 1994). It has also been viewed as a multidimensional construct formed from the consumer's evaluation of a number of service-related attributes (Parasuraman et al., 1988; Brady and Cronin, 2001). Numerous studies have examined service quality in the hotel industry (Tsang and Qu, 2000; Ekinci et al., 2003; Juwaheer, 2004). The outcomes of these studies have produced several contributions in relation to understanding the dimensional structure of service quality of hotels. The literature revealed that there is considerable debate as to the nature and the basic dimensions of service quality and the dimensions that may be common versus distinct across services (Cronin and Taylor, 1992; Brown et al., 1993; Taylor and Baker, 1994). Most of this debate is centered on the appropriateness of measuring

service quality as a gap between customer expectations and customer evaluations of performance and the dimensionality of the SERVQUAL scale (Parasuraman, Berry and Zeithaml, 1991; Cronin and Taylor, 1992).

Corporate Image

Rynes (1991) considered corporate image is the image associated with the name of an organization. Corporate image has also been defined as the perceptions of an organization reflected in the associations held in consumer memory (Keller, 2003). According to Grönroos (1984), corporate image is a filter which influences the perception of the operation of the company. In short, corporate image is described as the overall impression made on the minds of the public about a hotel firm (Barich and Kotler, 1991). It is related to the various physical and behavioral attributes of the firm, such as business name, architecture, variety of products/services, and to the impression of quality communicated by each person interacting with the firm's clients (Nguyen and Leblanc, 2001). As such, corporate image has two principal components: the functional and the emotional (Kennedy, 1977). The functional component is related to tangible characteristics which can be easily measured, while the emotional component is associated with psychological dimensions which are manifested by feelings and attitudes towards a hotel firm. These feelings are derived from individual experiences with a hotel firm and from the processing of information on the attributes that constitute functional indicators of the hotel image (Kennedy, 1977).

Customer Loyalty

Customer loyalty has received increasing attention by both practitioners and researchers who realized that attracting new customers is far more expensive than retaining existing ones (e.g., Holmund and Kock, 1996; Reinchheld and Sasser, 1990; Wong and Sohal, 2002). Berry and Parasuraman (1991) argued that the ultimate goal of the marketing process is to intensify the strong relationships with loyal customers, and to transform indifferent customers into loyal ones. Customer loyalty has been defined and measured mainly from two perspectives: behavioral and attitudinal perspectives (Kandampully and Suhartanto, 2003). The behavioral perspective views the customer loyalty as actual behavior of repurchasing products/services from a same provider and distributing positive word-of-mouth (Osman, 1993). On the other hand, Jones and Sasser (1995) stated that customer loyalty is "a feeling of attachment to or affection for a company's people, products, or services". Therefore, Getty and Thompson (1994) supplemented the behavioral approach with the concept of relative attitude which refers to a customer's intention to repurchase and recommend. Further, Dick and Basu (1994) proposed that loyalty is greatly affected by the relative strength of the relationship between attitude and behavior. They posited that true loyalty only exists when repeat patronage coexists with a high relative attitude. Attitude denotes the degree to which a consumer's disposition towards a service is favorably inclined (Azjen and Fishbein, 1980). This is reflected, for instance, in the willingness to recommend a service provider to other consumers or the commitment to repatronise a preferred service provider (Gremler and Brown, 1996). Based on favorable attitude towards a service provider, customers may develop preferences. Thus current definitions of customer loyalty include both attitudinal and behavioral component (Fullerton, 2005; Pura, 2005).

Relationships among Service Quality, Corporate Image, and Service Loyalty

The overall image of the hotel firm is influenced by service quality. Gronroos (1984) argued that corporate image is built mainly by technical quality that is what the customer receives from the service experience, and functional quality, the manner in which the service is delivered. Nguyen and LeBlanc (1998) tested the relationship between service quality and corporate image and report that customers who perceive service quality over repeated service encounters have an overall favorable image of the firm.

H1: Service quality has a positive impact on corporate image.

With regards to service loyalty, service quality is often viewed as a key antecedent. Many researchers have identified a positive link between service quality and customer retention. Dick and Basu (1994) proposed that customers' belief with regard to service quality dimensions should lead to repeat patronage. Tepeci (1999) suggested that offering added value features and consistently providing high quality service may help hospitality managers increase their number of brand loyal customers. Boulding et al. (1993) found positive relationships between service quality and repurchase intentions and willingness to recommend. Zeithaml *et al.* (1990) reported a positive relationship between service quality and the willingness to pay a higher price and the intention to remain loyal in case of a price increase. Dube and Renaghan (1999) investigated the effect of several functional areas of hotels on guest loyalty outcomes and found that the quality of various hotel services was the number one factor impacting on

loyalty levels followed by the quality of service personnel. In short, service quality is one of the primary drivers of consumer loyalty and loyalty-related behaviors in the hospitality industry, and hence it can be argued that service quality makes the most important impact on customer loyalty.

H2: Service quality has a positive impact on customer loyalty.

Corporate image serves as an important factor influencing customer loyalty, and a favorable image can influence repeat patronage (Dick and Basu, 1994; Andreassen and Lindestad, 1998). Image is considered to influence customers' mind through the combined effects of advertising, physical image, and their actual experiences with the services (Normann, 1991). In their study on hotel brand loyalty, Heung et al, (1996) found that hotel image is an important factor, and to maintain a relatively high score rating among loyal customers. Kandampully and Suhartanto (2000) further identified that the hotel image and customer satisfaction has direct impact through the performance of housekeeping, reception, food and beverage and are positively correlated to customer loyalty. The results of their study indicated that hotel image and customer satisfaction are important factors in determining a customer's intention to repurchase, to recommend, and exhibit loyalty. Nguyen and LeBlanc (2001) found positive influence customer satisfaction, service quality, and value on perceptions of corporate image and customer loyalty. Their results indicate that customers who receive higher levels of service quality will form a favorable image of the firm. They also found that customer satisfaction and image perceptions impacted on service loyalty. A study conducted by Swait et al. (1993) showed that consumers are willing to pay a higher price for higher quality brands; thus stronger brand images can influence customers to pay higher prices and retain customer loyalty. Therefore,

H3: Corporate image has a positive impact on customer loyalty.

METHODOLOGY

The hypothesized model was examined with data collected in several cities in Mauritius over a 4-week period. Mauritius is a bilingual country where both French and English are held as official languages, because of this Mauritius is able to attract large numbers of both English speaking and French speaking tourists. Hence the structured questionnaires were prepared in both English and French. Back translation is used to ensure that both questionnaires communicated similar information to all respondents (Brislin, 1970). Participants were customers of various hotels in Mauritius and they were randomly approached and invited them to participate in a survey on the hotel services. The sample of the study consisted of customers from three categories namely luxury, mid-scale and economy hotels (luxury hotel-26%, mid-scale hotel-64%, and economy hotel-10 %) in Mauritius. One thousand eight hundred (1800) questionnaires were handed out to the hotel guests and out of which 1450 useable responses were received, providing an 80% response rate.

The questionnaire used composed of 16 questions. Service quality was measured with multiple items, a scale modified from Parasuraman et al.'s SERVQUAL instrument, with 7-point Likert type scale. Specific items were developed for each quality related factor, i.e., "tangibles", "reliability", "responsiveness", "assurance", and "empathy" which were each measured by related parts of SERVQUAL with small wording changes. Corporate image is operationalized based on the dimension of image attributes and image holistic. The dimension of attributes is operationalized based on the guest's perception of the hotel location, physical facilities, interior design, price, the quality of the goods and service provided, and staff performance. The operationalization of the holistic dimension of hotel image is based on the customer's perception of the hotel's atmosphere, reputation, external appearance, and the layout (Kandampully and Suhartanto, 2000). A likelihood scale anchored with 1 (strongly disagree) and 7 (strongly agree) was used to measure corporate image. Regarding the measure of customer loyalty, behavioral intentions scale developed by Zeithaml et al. (1996) were used namely repurchase intentions, willingness to recommend, and price sensitivity. Each of the items was accompanied by a 7-point scale ranging from 1 = not at all likely to 7 = extremely likely.

RESULTS

Table 1 presents the results of demographic analysis. In the sample, 54% (777) of the respondents were male, and about 46% (673) were female. 9% (133) of the subjects were under aged 24, 40 % (575) were 25-34 years old, 34% (486) were between age 35 and 44 years old, and another 17% (256) were above 45 years old. Majority of subject (85%) were vacationers, 191 (13%) were business travelers, 24 (2%) were traveling for other purposes. Also, the majority of the subjects 1158 (80%) stay at the hotel for more than six nights.

Table 1
Description of the Respondents (n = 1450)

Variables	Number	%
Gender		
Male	777	54%
Female	673	46%
Age		
18-24	133	9%
25-34	575	40%
35-44	486	34%
45-54	197	13%
Above 55	59	4%
Purpose of Travel		
Business	191	13%
Vocation	1235	85%
Other	24	2%
Number of Nights Stayed in the Hotel		
1 night	15	1%
2-3 nights	60	4%
4-5 nights	217	15%
6 nights or over	1158	80%

The Measurement Model

Following the two-step approach recommended by Anderson and Gerbing (1988), the adequacy of each multi-item scale in capturing its construct was assessed using the measurement model of all constructs, by checking internal consistency reliability, convergent validity and discriminant validity, before testing the hypotheses via the causal model. Firstly, the composite reliability for internal consistency was demonstrated, since values for all constructs were above the suggested threshold of 0.70, with a minimum of 0.81. Secondly, the *t*-values for all standardized factor loadings were significant ($p < 0.05$) and indicate that our measures satisfy convergent validity (Gefen et al. 2000) (see Table 2).

Table 2
Confirmatory Factor Analysis Results and Relevant Composite Reliability

Constructs and Items	Loading	T-value	Composite Reliability
<i>Service quality</i>			.91
Tangible	0.68	28.71	
Reliability	0.85	40.01	
Responsiveness	0.87	40.91	
Assurance	0.89	42.61	
Empathy	0.85	39.53	
<i>Corporate image</i>			.91
Attributes image	0.94a	--	
Holistic image	0.89	54.35	
<i>Customer loyalty</i>			.81
Word-of-mouth	0.84	8.34	
Purchase intention	0.72	8.24	
Price Sensitivity	0.23 a	--	

a: loadings are specified as fixed to make the model identified.

As shown in Table 3, the average variance extracted (AVE) of each construct in the model was more than 0.60, which meets the criterion of a construct's AVE; i.e. it should be, at least, higher than 50% to guarantee more valid variance explained than error in its measurement (Fornell and Larcker, 1981). Thirdly, apart from the above-

mentioned convergent validity, the constructs should also show high discriminant validity. Discriminant validity exists when the proportion of variance extracted in each construct (average variance extracted [AVE]; $\rho_{vc}(\eta)$) exceeds the square of the coefficient representing its correlation with other constructs (Fornell and Cha, 1994). Thus, the constructs are both conceptually and empirically distinct from each other.

Table 3
Correlation Coefficients and the Square Root of AVE for All Constructs

Variable	Mean	S.D.	SQ	CI	CL	AVE
Service quality	6.18	.64	1			.83
Corporate image	6.19	.82	.75 (.56)	1		.92
Customer loyalty	5.41	.80	.58 (.33)	.73 (.53)	1	.62

a. All correlation coefficients were significant at the .01 level.

b. All AVE exceed .50, showing construct validity.

Structural Model Results

Structural equation modeling using Lisrel VIII (Joreskog and Sorbom, 1993) was used to test the hypothesized model. The results presented in Table 4 show that Chi-square is significant ($\chi^2(32) = 508.66$, $p < 0.05$). As the Chi-square is not independent of sample size (Bollen, 1989; Joreskog and Sorbom, 1993), we did not rely solely on the Chi-square to test the proposed model. The CFI (Comparative Fit Index), GFI (Goodness of Fit Index), and NNFI (Non Normed Fit Index) have been recommended to counteract the influence of sample size. A rule of thumb is that these indexes should be greater or equal to 0.90 (Bentler and Bonett, 1980). On that basis (CFI = 0.97, GFI = 0.93, NNFI = 0.96) the authors decided that the data fitted the model well. Given the large sample size the Root Mean Square Error of Approximation (RMSEA) might provide even a better indication of goodness-of-fit (Steiger, 1990). The value of the RMSEA equals 0.08 which is the recommend cut-off value of 0.08. Thus overall the data indicate an excellent fit for our hypothesized model.

Table 4
Structural model results

			Coefficient	S.E	T-value
Service quality	Corporate image	χ^2_{11}	.80**	.03	33.59
Service quality	Customer loyalty	χ^2_{21}	.04	.04	1.11
Corporate image	Customer loyalty	χ^2_{21}	.94**	.06	7.99
Goodness-of-fit statistics					
CFI			0.97		
GFI			0.93		
NNFI			0.96		
RMSEA			0.08		
Chi-square			508.66		

* $p < .05$. ** $p < .01$

Test of Hypotheses

The path coefficients are presented in Figure 2. As hypothesized, the relationship between service quality and corporate image was statistically significant ($\gamma_{11} = .80$, $t = 33.59$, $p < .01$); thus H1 was supported. This finding suggests that customers who received high service quality during service delivery would form a favorable image of the hotel. Although a positive relation between service quality and customer loyalty was expected, the path between service quality and customer loyalty was not significant ($\chi^2_{21} = .04$, $t = 1.11$). Service quality has no direct effect on customer loyalty; thus, H2 was not supported. However, the mediating effect of corporate image in the relationship between service quality and customer loyalty was found to be significant (effect = .76, $t = 7.79$). Finally, corporate image is the primary path to customer loyalty ($\chi^2_{21} = .94$, $t = 7.99$, $p < .01$). The results support H5 and indicate that corporate image has a strong impact on customer loyalty.

CONCLUSIONS

In this paper, we examined the relationships among service quality, corporate image, and loyalty in hotel industry in Mauritius. Our results indicate that corporate image is influenced by service quality, and in turn it influences loyalty. We find support for the contention put forth by previous researchers that service quality is an important influencer of corporate image in hotel industry. Contrary to our hypothesis, we did not find that high service quality will result in loyalty to a hotel. Thus service quality in itself will not translate into loyalty. However, our results indicate that service quality has an indirect effect on customer loyalty via corporate image. Finally, our findings suggest that corporate image has a strong impact on customer loyalty. Thus the key to customer loyalty appears to be the fostering of a favorable image of the hotel; and a favorable image can be created by improving service quality.

In Mauritius's competitive market, hospitality firms are seeking ways by which they can communicate uniqueness to the customer through superior performance so as to enhance the firm's corporate image and to gain long term loyalty. This study clearly provides hospitality managers the insight that can direct their strategies and to focus on the firm's long term goal to enhance the firms' image and customer loyalty on an ongoing basis. Although service quality is imperative for the firms' success, hospitality managers in Mauritius have to develop strategies that are aimed to enhance the firm's image in the customers mind. From a strategic perspective service quality, image and loyalty should be managed both from operational and marketing perspective. From this study results we know that image has a high impact on loyalty and hence image building strategies should be part of the hotel firm's commitment to sustain superior operational performance. For example, Ritz Carlton maintains its elite position in the hospitality industry by maintaining its superior image in the marketplace. Ritz Carlton's image further gains them the loyalty of its customers, since their customers expect Ritz Carlton to provide superior service without fail, every time, all the time. Thus hospitality firms should take on the task of long term commitment to service quality and not merely as an operational challenge but also to support the firm's image building initiative.

Some potential limitations of this study should be noted. First, the link between customer loyalty and actual future behaviours remains tenuous, in spite of limited empirical evidence (Hurley and Estelami, 1998). Therefore, further research should also take actual actions of consumers into account. Second, future research should further investigate the impacts of service quality, corporate image, and customer loyalty on organizational performance measures, such as profitability and extend the integrative framework and take other variables into consideration to provide managers with more useful suggestions to attract new customers and retain existing customers.

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TOWARDS SUSTAINABLE CONSUMPTION CONSUMERS' WILLINGNESS TO PATRONIZE GREEN RESTAURANTS

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ABSTRACT

The purpose of this study is to identify the factors influencing consumers' intention to patronize at *green* restaurants. The study specifically discusses the relationships between consumers' knowledge of *green* restaurants, environmental concern, ecological behavior, and their intention to consume at *green* restaurants. Five hundred questionnaires were distributed, and 393 useable responses were received with a 78.6% response rate. The results of this study reveal that consumers' knowledge of *green* restaurant, environmental concern, and are important determinants of consumers' intention to patronize a *green* restaurant.

Key Words: green restaurant, consumer knowledge, environmental concern, ecological behavior

INTRODUCTION

For most businesses, being "green" has become a key to survival, although the underlying motivation for such a policy may be characterized from three perspectives: legislation, marketing and values (Gummeson, 1994). The "greening" of the foodservice field has been pursued to make it appear more 'environmental friendly'. Although the interest for the environment in foodservice field appears to be a relatively new phenomenon, a debate has already started about the responsibilities of foodservice industry with reference to the areas such as reduction of solid waste, water consumption, energy consumption and air pollution.

Concern for environmental and social considerations within the foodservice field can be evidenced by the growth in development of *green* restaurants. There is a growing amount of evidence indicating that consumers are choosing products or avoiding others based on their impact on the natural environment (Davis, 1993; McDougall, 1993). Other studies suggest that consumers not only prefer to purchase products that are less harmful to the environment but are willing to pay more to do so (Parsa et al 2007, Coddington, 1993; Ottman, 1992). In the USA, numerous studies were conducted in an attempt to identify consumers' attitudes towards tourism and the environment. In the US, 67% of respondents stated they would be willing to pay 5 to 10% more for environmentally compatible products (Coddington, 1990). In a survey of frequent travelers, 75 % of travelers stated that they are environmentally minded consumers, and 54 % of respondents noted that they wanted to stay in hotels that show concern for the environment (Watkins, 1994).

From 1990 to 2005 tourism increased rapidly with international arrivals increasing from 1.8 to 3.3 million (Taiwan Tourism Bureau, 2006). However, the Government of Taiwan has realized that its once beautiful and natural environment has paid a heavy toll for its past economic development activities (Feeley, 1990). Now, the Taiwanese Government is attempting to improve the recreational environment throughout the island. During the past decade, the government has passed numerous laws, amendments and guidelines on this subject. It is clear that environmental protection is an issue of great urgency. Thus, the purpose of this study is to identify the factors influencing consumers' intention to patronize at *green* restaurants in Taiwan. The study specifically discusses the relationships between consumers' knowledge of *green* restaurants, environmental concern, ecological behavior, and their intention to consume at *green* restaurants.

Environmental Impacts of Foodservice Sector

Although the chemical and oil industries were initially the focus of attention for environmentalists due to the visible nature of their environmental impact, the foodservice sector hasn't received much attention. The

foodservice sector accounts for 10% of the U.S. economy. It is the number one electricity consumer in the retail sector and accounts for 33% of all U.S. retail electricity use (The Green Restaurant Association, 2007). Thus, restaurants have a significant environmental impact. Although this sector perhaps is less visible in its environmental impact, it is increasingly being recognized for its ability to reduce many environmental factors such as solid waste, energy conservation etc.

The prime environmental challenges facing the foodservice sector involve the generation of significant amounts of solid waste, assurance of food safety, high energy-intensity levels, and use of chlorofluorocarbons in refrigeration. For example, research in the late 1970s and early 1980s on food waste in UK hotel and restaurants indicated that 15.5 percent of edible food was wasted. A similar figure for hospital catering departments was 30 percent (Kirk and Osner, 1981). These figures represent a high monetary value because of high value-added associated with the waste of prepared food. It also represents a waste of energy because the food has been transported, stored and cooked. Significant portion of this waste can be avoided or minimized through sound management practices.

In a survey of restaurants in the Tampa Bay area, the Florida Energy Extension Service and Miller (1994) found that restaurants annually used 512,000 Btu per square foot. Restaurants are the most energy intense commercial buildings in Florida, using on average 22 times more energy than a family of four. Air-conditioning is the biggest energy user in the restaurant, using over 40% of the energy. About 38% of the energy is used for food preparation. Refrigeration and sanitation are two additional big users. This energy usage has significant environmental impact. It is estimated that every year in Florida energy production and use associated with restaurants contribute more than 30 billion pounds of CO₂ and 84 million pounds of SO₂ to the air. A decrease in energy use in restaurants by only 5% would reduce CO₂ emissions by 1.5 billion pounds every year. Energy use also means resource depletion. Operating the lights just in the kitchen of a restaurant for one year can use about two tons of coal. It is coal that took nature 100 to 400 million years to make and not exactly a readily renewable resource (Florida Energy Extension Service and Miller, 1994).

Green Restaurant

Green restaurant may be defined as “new or renovated structure designed, constructed, operated and demolished in an environmentally friendly and energy-efficient manner (Lorenzini, 1994). Compare to a traditional restaurant, a *green* restaurant focus on three Rs-reduce, reuse and recycle and two Es-energy and efficiency: from the improvement of waste management, energy and water conservation, and indoor air quality to the reduction of noise and limited use of pesticides and herbicides (Gill *et al.*, 2005).

According to the Green Restaurant Association (2007), an environmental management system in a restaurant can be seen as having a number of linked aspects. Following are some of the suggested topics listed by the Green Restaurant Association.

1. Energy efficiency and conservation: Improve the energy efficiency of lighting, refrigeration, air conditioning, and gas appliances.
2. Water efficiency and conservation: Improve the water efficiency of toilets, faucets, laundry, and sprinkler systems.
3. Recycling and Composting: Transition to recycled products with the highest post consumer content available and non-tree-fiber paper products: napkins, paper towels, toilet paper, office paper, take-out containers, coffee jackets, plates, and bowls.
4. Sustainable Food: Sustainable food products support the long-term maintenance of ecosystems and agriculture for future generations. Organic agriculture prohibits the use of toxic synthetic pesticides and fertilizers, irradiation, sewage sludge, and genetic engineering. Locally grown foods reduce the amount of pollution associated with transportation primarily by fossil fuels. Plant-based foods require fewer natural resources and create less pollution per calorie consumed.
5. Pollution Prevention: Achieved through source reduction, reuse, or improving operational practices.
6. Recycled, tree-free, biodegradable and organic products. Recycled products are made from materials that are collected from post-consumer or post-industrial waste sources. Tree-free products are made from alternative plant sources such as hemp or kenaf. Biodegradable products are capable of being decomposed by biological agents, especially bacteria. Organic products are grown without the use of toxic synthetic pesticides and fertilizers, irradiation, sewage sludge, and genetic engineering.

7. Chlorine-free paper products: Chlorine-free paper products are unbleached or whitened with alternatives such as hydrogen peroxide, oxygen, and ozone.

8. Nontoxic Cleaning and Chemical products: Replace hazardous chemical products with biodegradable and nontoxic alternatives; dish detergent, germicides, disinfectants, toilet bowl cleaners, drain cleaner, floor wash, floor polish, glass cleaners, degreasers, and laundry detergent.

9. Renewable Power: Electricity and power is available from renewable resources such as wind, solar, geothermal, small hydro and biomass. These energy sources cause dramatically less air pollution and environmental damage compared to fossil fuel, nuclear, and large-scale hydroelectric energy source.

10. Green Building and Construction: Green design and construction practices significantly reduce or eliminate the negative impact of buildings on the environment, occupants, and the local community.

11. Employee Education: Train all employees, managers, and owners. Topics covered include an environmental profile of the restaurant industry, a history of environmental issues relevant to food service: landfills, water pollution, air pollution, clear-cutting, and global warming, and data describing the restaurant impacts on the environment.

Consumer Knowledge of Green Restaurants

Knowledge is commonly seen as a necessary precondition for an individual's behavior. Past research has examined various factors that influence such behavior, such as environmental knowledge, or one's ability to understand and evaluate the impact of society on the ecosystem. According to Kaplan (1991), the state of one's knowledge about an issue impacts significantly one's decision making. Specifically, people dislike, and thus tend to avoid situations where they have insufficient knowledge to guide their behavior and where the possibility of confusion is great. This absence of sufficient knowledge factor explains why some people prefer to patronize or not at a *green* restaurant. Many studies have shown that knowledge about the environment generally motivates ecologically or environmentally responsible consumer behavior (Ibrahim, Aliagha, and Khoos, 1999; Chan, 1999; Amyx *et al.*, 1994). In Ibrahim, Aliagha, and Khoos' study (1999), they also concluded that information and knowledge about recycling were both significant predictors of recycling behavior. Chan (1999) has found that knowledge about ecological issue is a significant predictor of environmental friendly behavior. Amyx *et al.* (1994) even found that individuals highly knowledgeable about environmental issues were more willing to pay a premium price for *green* products. Thus,

H1: Consumer knowledge of a green restaurant positively affects consumers' intentions to patronize at a green restaurant.

Environmental Concern

General environmental concern is a construct frequently used as a measure of the importance of the environment and its protection, and it is cited as an indicator of the greening of consumption. Gill, Crosby, and Taylor (1986) defined environmental concern as a general or global attitude with indirect effects on behaviors through behavioral intentions. This definition was supported by Zimmer, Stafford, and Stafford (1994) who described environmental concern as "a general concept that can refer to feelings about many different green issues."

The relationship between environmental concern and behavior is one that has been explored in a variety of contexts. Several studies indicated a positive relationship between environmental concern and environmental friendly behavior (e.g. Hines, Hungerford, and Tomera, 1987; Ellen, Wiener, and Cobb-Wallgren, 1991; Laroches, Bergeron, and Barbaro-Forleo, 2001). In Hines, Hungerford, and Tomera (1987) meta-analytic review of 187 studies in this area, they examined a range of variables associated with responsible environmental behavior. Their review found that individuals who expressed higher levels of environmental concern were more likely to have reported engaging in such activities as recycling, petitioning, and energy conservation. Ellen, Wiener, and Cobb-Wallgren (1991) found that a general attitude such as environmental concern toward improving the environment was significant predictor of purchasing environmentally safe products and recycling. In Laroches, Bergeron, and Barbaro-Forleo's (2001) study, attitudes were found to be excellent predictors of ecologically friendly behavior. The attitude that showed the most discriminating power between the two segments of consumer is the perceived inconvenience of being environmentally friendly. Their study revealed that consumers willing to pay more for green products did not perceive it inconvenient to behave in an ecologically favorable manner. These studies suggest that environmental concern can be useful in predicting environmental consumption.

H2: Environmental concern positively affects consumers' intentions to patronize a green restaurant.

Ecological Behaviors

Suchard and Polonski (1991) stated that ecologically conscious consumers will try to protect the environment in different ways (e.g. recycling, purchasing only green product). The results in Laroche, Bergeron, and Barbaro-Forleos' study (2001) indicated that consumer who consider environmental issues when making a purchase are more likely to spend more for green products. However, the behaviors "recycling" and "buying environmentally friendly products" were not found to predict consumers' willingness to pay more for green products. Therefore, it is not clear how ecological favorable behaviors will be related with consumers' intentions to patronize a green restaurant, stated in null form.

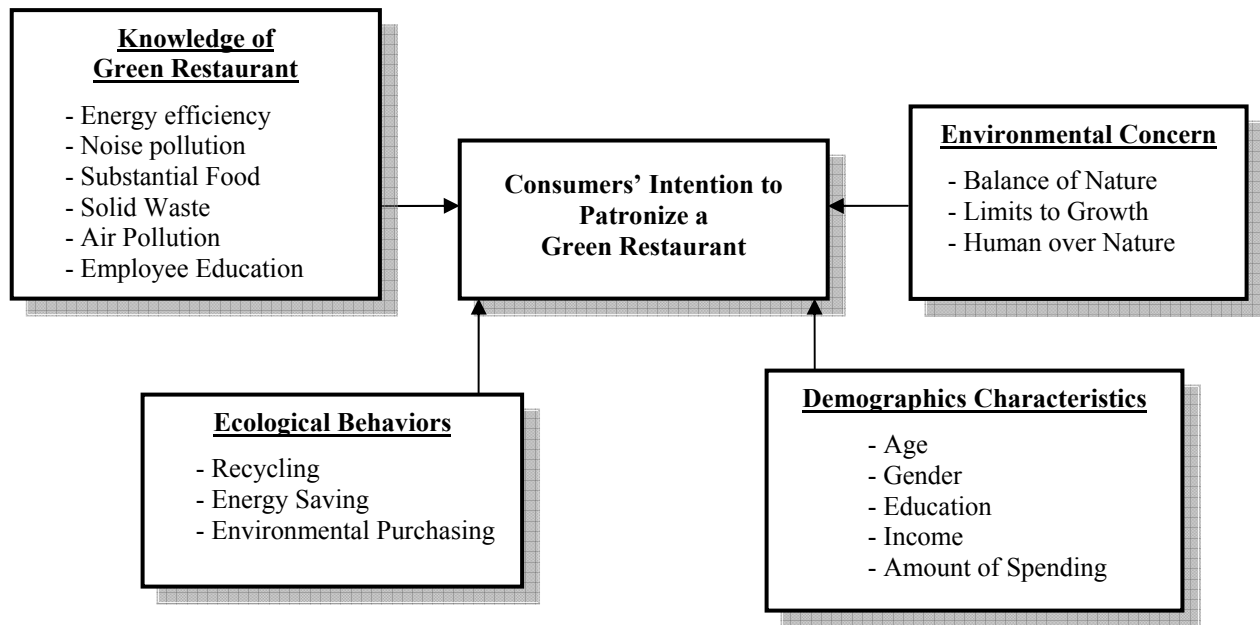
H3: Environmental behavior has no affect consumers' intentions to patronize a green restaurant.

Consumers' Demographic Characteristics

Numerous studies have made attempts to identify demographic variables that correlate with environmental consumption. Age, gender, education, income, and family size have been found o be significantly correlated with environmental behavior (Roberts, 1996; Roberts and Bacon, 1997; Schwartz and Miller, 1991). Age has been explored by a number of researchers in studies of ecology and green marketing. Some of the researchers have found the relationship to be significant and negatively correlated with environmental behavior as predicted (e.g. Van Liere and Dunlap, 1981; Zimmer et al., 1994). Others have found the relationship to be significant and positively correlated (Roberts, 1996; Samdahl and Robertson, 1989). Moreover, the development of unique sex roles has led most researchers to argue that women are more likely than men to hold attitudes consistent with the green movement. Eagly (1987) stated that women will, as a result of social development and sex role differences, more carefully consider the impact of their actions on others. In addition, several studies have shown positive relationship between income and environmental behaviors (Newell and Green, 1997; Roberts, 1996; Roberts and Bacon, 1997). Individuals can, at higher income levels, bear the marginal increase in costs associated with supporting green causes and favoring green product offerings. Finally, level of education is another demographic variable that has been linked to environmental behavior (e.g. Roberts, 1996; Roberts and Bacon, 1997; Schwartz and Miller, 1991). Specifically, education is expected to be positively correlated with environmental consumption.

H4: Demographic characteristics affect consumers' intentions to patronize a green restaurant.

Figure 1
Conceptual Model



METHODOLOGY

The hypothesized model was examined with data collected in Taiwan over a 4-week period. Participants were randomly approached and invited them to participate in a survey. Participants were interviewed using a structured questionnaire to learn their knowledge of *green* restaurants, environmental concern, ecological behavior, and their intention to patronize a green restaurant. Five hundred questionnaires were distributed, and 393 useable responses were received with a 78.6% response rate.

The survey questionnaire was divided into five parts. First part measured the knowledge of *green* restaurant characteristics with 36 questions with topics such as energy efficiency, noise pollution, food sustenance, solid waste, air pollution, and employee education. Second part measured the environmental concern of consumers. New environmental paradigm (NEP) scale (Dunlap and Van Liere, 1978) was used to measure the environmental concern with three dimensions such as balance of nature, limits to growth, and human over nature. Third part measured the behaviors of respondents toward the environment. This section contained 12 questions asking the respondent how often they engaged in particular green-friendly behaviors. Fourth part of the questionnaire explored the intention to patronize a *green* restaurant with 5 questions. Each of the items in the questionnaire was accompanied by a 5-point scale ranging from 1 = extremely disagree to 5 = extremely agree. The last part of the questionnaire measured the following demographic characteristics: age, gender, education, income, and average amount of spending in restaurants a month.

RESULTS AND DISCUSSIONS

Descriptive statistics including frequency and mean of each demographic variable are included in Table 1. The assessment of the measurement properties of the scales and the test of the hypothesized relationships presented in the conceptual model were undertaken with the LISREL 8 (Joreskog and Sorbom, 1993). The hypothesized relationships were then tested with a structural equation model.

Table 1 presents the results of the demographic data. Regarding the impact of demographic characteristics on consumers' intention to patronize a *green* restaurant; firstly, results revealed that there is no differences between male and female respondents in mean scores of patronizing intention at a green restaurant ($t = 1.94$; $p > 0.05$). Secondly, the mean scores among different age groups for patronizing intention at a *green* restaurant ($F = 4.52$; $p < 0.01$) were significantly different. Respondents whose ages in 41 to 50 years old and above 51 years have higher intentions to patronize a *green* restaurant than other age groups. Thirdly, the mean scores of patronizing intention at a green restaurant among different level of education ($F = 3.41$; $p < 0.01$) are significantly different. Respondents who have higher level of education tend to have higher intentions to patronize a *green* restaurant than the respondents who have lower education level. Fourthly, consumers' intention to patronize a *green* restaurant among different income groups ($F = 7.47$; $p < 0.01$) were significant different. Participants at higher income level are more likely to patronize a *green* restaurant than participants at lower income level. Finally, there is no significant difference in consumers' intention to patronize at a green restaurant among different level of monthly spending in dining out ($F = 2.17$; $p > 0.05$). In summary, demographics characteristics such as age, education, and income have significant impacts on consumers' intentions to patronize a *green* restaurant. Thus, H4 were partially supported.

Table 1
Description of the Respondents (n =393)

Variables	Number	%	Mean of Patronizing Intention
Gender			
Male	151	39%	4.16
Female	242	61%	4.14
Age			
Under20	24	6%	3.93
21-30	160	41%	4.08
31-40	96	24%	4.10
41-50	54	14%	4.38**
Above 51	59	15%	4.31**
Education			

<i>High School graduates</i>	79	20%	3.98
<i>College graduates</i>	94	24%	4.12
<i>Bachelor's degree</i>	177	45%	4.33**
<i>Graduate degree</i>	43	11%	4.11
Income (Monthly)			
<i>Under NT\$20,000</i>	118	30%	4.19
<i>NT\$20,001~NT\$40,000</i>	153	39%	3.98
<i>NT\$40,001~NT\$60,000</i>	74	19%	4.30
<i>NT\$60,001~NT\$80,000</i>	32	8%	4.41**
<i>Above NT\$80,001</i>	16	4%	4.44**
Monthly Spending in Dining Out			
<i>Under NT\$2,400 (Low)</i>	120	31%	4.07
<i>NT\$2,401~NT\$4,800 (Middle)</i>	166	42%	4.15
<i>Above NT\$4,800 (High)</i>	107	27%	4.24

Note: *and **Significance levels at the .05 and .01

Measurement Model

Following the two-step approach recommended by Anderson and Gerbing (1988), the adequacy of each multi-item scale in capturing its construct was assessed using the measurement model of all constructs, by checking internal consistency reliability and convergent validity, before testing the hypotheses via the causal model. Firstly, the composite reliability for internal consistency was demonstrated, since values for all constructs were above the suggested threshold of 0.70, with a minimum of 0.74. Secondly, the t-values for all standardized factor loadings were significant ($p < 0.05$) and indicate that our measures satisfy convergent validity (Gefen, Straub, and Boudreau, 2000) (see Table 2).

Table 2
Confirmatory Factor Analysis Results and Relevant Composite Reliability

Constructs and Items	Loading	T-value	Composite Reliability
Knowledge of Green Restaurants			.86
<i>Energy Efficiency</i>	.75	16.67	
<i>Noise Pollution</i>	.74	16.30	
<i>Substantial Food</i>	.57	11.67	
<i>Solid Waste</i>	.74	16.47	
<i>Air Pollution</i>	.77	17.18	
<i>Employee Education</i>	.72	15.79	
Environmental Concern			.74
<i>Balance of Nature</i>	.79	14.05	
<i>Limits to Growth</i>	.57	10.57	
<i>Human over Nature</i>	.18	3.07	
Ecological Behavior			.80
<i>Recycling</i>	.62	12.79	
<i>Energy Saving</i>	.74	15.53	
<i>Environmental Purchasing</i>	.94	20.71	
Patronizing a Green Restaurant			.82
<i>Considerable Chance to Patronize</i>	.65	a	
<i>Recommend Others to Patronize</i>	.84	13.25	
<i>Predominantly Patronize</i>	.85	13.25	

a: loadings are specified as fixed to make the model identified.

Structural Model

Using structural equation modeling, the relationships hypothesized in this study were analyzed. Figure 2 illustrates the structural equation model that was tested in this phase of the analysis. Results indicate an excellent fit of the model. The Chi-square was insignificant ($\chi^2(84) = 3.20, p < 0.05$). Reliance on the chi-square test as a sole

measure of fit in a structural equation model is not recommended due to its sensitivity to sample size. Given its sensitivity to sample size, a variety of fit statistics were applied to assess the "goodness of fit" of the model. Measures of fit included the Comparative Fit Index (CFI), the Goodness of Fit Index (GFI), the Non Normed Fit Index (NNFI), and the Root Mean Square of Approximation (RMSEA). The three fit indexes CFI, GFI, and NNFI (CFI = 0.95, GFI = 0.90, and NNFI = 0.94) are all close to or even exceed the recommended level of 0.9 representing reasonable fit (Broome et al., 1997). The RMSEA is the least affected by sample size (Hu and Bentler, 1995), the value of the RMSEA equals 0.08 which is the recommended cut-off value of 0.08. Thus overall the data indicate an excellent fit for our hypothesized model. The values are illustrated in Table 3.

Table 3
Structural Model Results

		Coefficient	S.E	T-value
Green Restaurant Patronizing Intention	□11	.33*	.09	3.60
Environmental Concern Patronizing Intention	□12	.36*	.10	3.73
Ecological Behavior Patronizing Intention	□13	.19*	.05	3.89
Goodness-of-fit statistics				
CFI		0.95		
GFI		0.90		
NNFI		0.94		
RMSEA		0.08		
Chi-square		320.11		

*p < .05. **p < .01

Test of Hypotheses

As hypothesized, the relationship between consumers' knowledge of *green* restaurants and patronizing intention at a *green* restaurant was statistically significant ($\gamma_{11} = .33, t = 3.60, p < .05$); thus H1 was supported. This finding suggests that customers who know more about *green* restaurants would have higher intentions to patronize a *green* restaurant. Moreover, the relationship between environmental concerns and patronizing intentions at a *green* restaurant was found to be statistically significant ($\gamma_{12} = .36, t = 3.73, p < .05$). Thus, H2 that consumers' environmental concern has a positive impact on their intentions to patronize a *green* restaurant was also supported. Finally, the effect of consumers' ecological behavior on their intentions to patronize a *green* restaurant was also found to be significant ($\gamma_{13} = .19, t = 3.89, p < .05$). Thus, H3 was rejected. The finding suggests that consumers' ecological behavior has a strong impact on their intentions to patronize a *green* restaurant.

CONCLUSIONS

In this paper, we examined the relationship between consumers' knowledge of *green* restaurant, environmental concern, ecological behaviors, demographic characteristics and consumers' intentions to patronize a *green* restaurant. The results of this study reveal that consumers' knowledge of *green* restaurant is an important determinant of consumers' intention to patronize a *green* restaurant. Six indicators, energy efficiency, noise pollution, substantial food, solid waste, air pollution, and employee education, suggest this interpretation. This suggests that educating consumers on environmental issues about *green* restaurant will encourage consumers' intentions to patronize a *green* restaurant. To enhancing the consumers' knowledge of *green* restaurant, marketers could use information cards, menu, or window display to inform people about the environmental effects of their consumption at a *green* restaurant. This information educates the consumers about *green* restaurant's substantial food, earth-friendly practices such as recycling, energy efficiency and conservation. Marketers should emphasize the difference between traditional restaurants and *green* restaurants by advertising the environmental friendly practices the restaurant adapts. Marketers should also communicate to the consumers that patronize at a *green* restaurant can have a significant impact on the welfare of the environment. Marketers should persuade consumers that environmental protection is not a sole responsibility of business and each individual can also make a difference.

The results suggest a significant relationship between environmental concern and consumers' intentions to patronize a *green* restaurant. Consumers who feel man must live in balance with nature choose products and activities that will have less impact on the environment, and therefore are more likely to patronize a *green* restaurant. These attitudes suggest that consumers can still consume but choices should reflect wise use of the natural resources.

Based on the above findings, marketers are advised to emphasize the delicate balance of nature and how consumers can still consume, but in a more ecologically friendly fashion. Another important finding of this study is that consumers who consider environmental issues when making a purchase are more likely to patronize a *green* restaurant. The ecological behaviors “recycling”, “energy saving”, and “environmental purchasing” were good predictors of consumers’ intentions to patronize a *green* restaurant. New communication strategies must be identified in order to motivate consumers to dine at *green* restaurants. Marketers must provide regular, positive feedback that shows individuals are making difference and that reinforces behavior through focusing on consumer success.

Based on the demographic analysis, the study found that age is positively correlated with consumers’ intentions to patronize a *green* restaurant. Older age group tends to be more environmental friendly and have higher intentions to patronize a *green* restaurant. It may be suggested that these individuals are more inclined to consider their health and environment, and think of how a ruined environment may negatively impact on their children’s future. A significant relationship appeared between one’s level of education and their intentions to patronize a *green* restaurant. Income was also found to be positively related to consumers’ intentions to patronize a *green* restaurant. The most common justification for this belief that individuals can, at higher income levels, bear the marginal increase in costs associated with supporting green causes and favoring *green* restaurant offerings. Therefore, marketers should be aware that consumers who are in older age group, more educated, and earn more money are more likely to patronize a *green* restaurant.

Lastly, it is important to note that due to limited resources, the present study is only confined to major cities in Taiwan. As such, the findings need to be confirmed by further evidence from other countries given the difference in values and cultures among different countries. Moreover, the link between customer’ dining intentions and actual future behaviors remains tenuous, in spite of limited empirical evidence. Therefore, further research should also take actual actions of consumers into account. In sum, while it is believed that the present study has contributed to a more in-depth understanding of the underlying factors influencing consumers dining intentions to green restaurant, the results se derived should be interpreted with caution and viewed as a foundation for more through follow-up research.

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EVALUATING EFFICIENCY IN THE CHINESE HOTEL INDUSTRY: A DATA ENVELOPMENT ANALYSIS APPROACH

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ABSTRACT

This paper uses data envelopment analysis (DEA) to benchmark the relative efficiency of China's hotel sector among its 31 provincial regions. Two popular DEA models are employed to generate three efficiency measures: the overall efficiency, pure technical efficiency, and scale efficiency. Subsequently, these efficiency scores are subject to cluster analysis and three distinctive clusters are identified. Findings of this research provide guidelines for formulating hotel market expansion strategies as well as evaluating Chinese hotel sector's production efficiency at the sub-national level. Limitations, implications, and suggestions for future research are discussed.

Key Words: hospitality, data envelopment analysis, cluster analysis, China

INTRODUCTION

China opened its market to the world in 1978 and it joined the World Trade Organization (WTO) in 2001. The Chinese market has become more accessible to global business investors in the past few decades. In fact, the tourism and hospitality sectors benefited considerably from China's open-market policy. Experts from the World Tourism Organization expect China to become one of the countries with the most inbound tourism by 2020. It is expected that the 2008 Summer Olympics in Beijing and the 2010 World Expo in Shanghai would further spur the demand for tourism in China and cause a more intensive competition among hotels for a share of the lodging market growth in China.

Evidence shows that multinational hotel giants such as Hilton, Marriott, and Accor are involved in a number of new hotel projects in China. Hoteliers and/or investors looking to find an optimal site to launch new hotel projects in China should carefully develop the market entry strategy. With the assistance of data envelopment analysis (DEA), the level of overall hotel efficiency in a region could be objectively reviewed before the selection of a market entry point. Furthermore, the DEA approach can be of great help to government decision makers and destination management organizations (DMOs) since the findings will enable them to benchmark a hotel sector's efficiency in a specific region with its counterparts.

Low efficiency within the hospitality industry has been a major concern, but this situation is unlikely to improve without a general change in the way efficiency is measured and managed (Sigala, 2004). Conceptually, the efficiency of a decision making unit (DMU) is determined by its ability to transform inputs into aimed outputs. A DMU in our study is referred to the hotel sector in a region and the DMU can be defined as relatively efficient by pricing the inputs (i.e., capital, labor, etc.) and outputs (i.e., room revenue, food and beverage revenue, etc.) in such a way that it can produce more outputs. If the hotel sector in a region is found to be inefficient, the efficiency measure obtained from DEA could be used to benchmark with its peers and make some improvements.

This paper attempts to 1) evaluate production efficiency of China's hotel industry among its 31 provincial regions by the DEA technique and 2) to categorize the DEA efficiency measures into manageable groups with the help of a cluster analysis. DEA is best suited to the comparison or benchmarking of a number of similar operational

units (Kirk, 2005). The findings of this research will have implications for government decision makers, hoteliers/investors and DMOs in their quest for formulating expansion strategies and investment decisions in China.

LITERATURE REVIEW

Productivity efficiency evaluation can be approached from a decision-making perspective as well as from the angle of performance improvements (Hwang & Chang, 2003). A number of research attempts have been made to study firm-specific performance efficiency, and these studies used average occupancy rates and average room rates as indicators of efficiency of hotel performance. Other studies used common economic indicators of efficiency in the hospitality industry such as revenue (Baker and Riley, 1994), RevPar (Wassenaar and Stafford, 1991), and breakeven room occupancy (Wijeyesinghe, 1993). However, these performance scores alone do not necessarily reflect the potential for higher economic returns in the less competitive hotels. Thus, attention to measuring performance efficiency of the hotel industry should be shifted from monitoring a few benchmarks (e.g., RevPar, revenue) toward a multidimensional system that considers the simultaneous use of multiple inputs to generate a set of greater outputs.

DEA has been widely used in various industries for analyzing efficiency in regional development (Karkazis, 1998; Dinc et al., 2003), the telecommunications industry (Uri, 2001; Bortolotti et al., 2002), the public transportation industry (Cowie, 2002), the banking industry (Luo, 2003), and the tourism industry (Hu & Cai, 2004; Hwang and Chang, 2003; Sigala, 2004; Wöber, 2006), among others. Within the DEA framework, performance of a decision making unit (e.g., a hotel, a hotel chain, or even as large as a nation), is evaluated with respect to an efficient frontier, which is constructed by linear combinations of peer decision making units. A distinguishing feature of the DEA approach is that, for each DMU, it calculates a single relative ratio by comparing total weighted outputs to total weighted inputs for each unit without requiring the proposition of any specific functional form.

Research using DEA to measure hotel production efficiency is scarce, and only a few recent studies started to raise attention among tourism researchers (Wöber, 2006). Table 1 presents a summary of the studies that applied the DEA approach to measure efficiency in the hotel industry. Notably, no prior research studied the increasingly important hotel industry in China and this paper will be the first attempt to explore the topic of production efficiency in the hotel industry in the Chinese market.

Table 1
Literature Survey of Recent DEA Studies in Hotel Industry

Authors	Method	Units	Inputs	Outputs
Barros and Mascarenhas (2005)	DEA	43 ENATUR pousadas	(1) number of full-time equivalent employees; (2) the book value of hotel's assets; and (3) the number of rooms.	(1) sale; (2) number of guests; (3) number of nights spent.
Chiang et al. (2004)	BCC model and CCR model	25 four or five star hotels in Taipei	(1) number of hotel rooms; (2) food and beverage capacity; (3) number of employees; and (4) total cost of the hotel.	(1) yielding index; (2) F&B revenue; (3) miscellaneous revenue.
Hwang and Chang (2003)	CCR model; Malmquist productivity approach	45 international hotels in Taiwan	(1) number of full time employees; (2) number of guest rooms; (3) total area of catering department; (4) operating expenses.	(1) room revenue; (2) food and beverage revenue; (3) other revenue.
Johns et al. (1997)	DEA	15 UK hotels over a 12-month period	(1) number of room nights available; (2) total labor hours; (3) total food and beverage costs; (4) total utilities cost.	(1) number of rooms nights sold; (2) total food covers served; (3) total beverage revenue.

METHODOLOGY

CCR and BCC Models

The DEA approach allows for the measurement of overall efficiency (OE), pure technical efficiency (PTE), and scale efficiency (SE). Two main types of DEA analysis, namely the input-oriented and the output-oriented analysis, have been widely applied to evaluate efficiency for various types of DMUs. Generally, the input-oriented analysis focuses on the cost minimization, while the output-oriented analysis focuses on the output maximization.

Since the objective of this study is to identify the determinants of relative efficiency and to maximize output of the analyzed regional hotel sector's performance, this study employs two basic output-oriented models to evaluate OE, PTE and SE of the Chinese hotel industry at the regional level. The first one is the CCR model, so-called since it was first introduced by Charnes, Cooper and Rhodes (1987). The second one is the BCC model since it was first used by Banker, Charnes and Cooper (1984). For all DMUs, overall efficiency refers to the extent to which a region achieves its optimum efficiency. The overall efficiency can be further separated into two components: pure technical efficiency and scale efficiency. Pure technical efficiency is concerned with the level of efficiency with which a regional hotel sector uses its inputs. Scale efficiency, on the other hand, is used to measure how scale impacts its productivity; it is the ratio of OE from the constant-return-to-scale (CRS) to PTE obtained from the variable-return-to-scale (VRS).

The CRS assumption is appropriate when all DMUs are operating at an optimal scale. However, factors such as unfair market competition, government regulations and financial constraints may cause a DMU to operate at a less-than-optimal level. The use of the CRS specification in circumstances when DMUs are not all operating at the optimal scale, results in measures of PTE that are confounded by scale efficiencies. Therefore, Banker, Charnes and Cooper (1984) relaxed the constraint of CRS. Their BCC model permits the calculation of PTE devoid of the SE effect.

The DEA efficiency score h_{j0_CCR} in a CCR model represents the OE, referring to the extent to which regions achieve the optimum productivity attainable in the most efficient manner. On the other hand, the DEA efficiency score h_{j0_BCC} in a BCC model corresponds to PTE, which refers to how efficiently a regional hotel sector utilizes the input factors. Finally, scale efficiency indicates how close the production size of a DMU is to the most productive scale. In fact, it is a ratio of OE (from the CCR model) to PTE (from the BCC model) as follows:

$$\text{Overall Efficiency} = \text{Pure Technical Efficiency} \times \text{Scale Efficiency}$$

As a result, unit j_0 is considered DEA efficient if the OE score is equal to unity in the CCR model, while the PTE score is equal to one in the BCC model. $SE=1$ indicates scale efficiency and $SE<1$ indicates scale inefficiency.

Input-output Indicators

The selection of the input and output indicators is based on two main criteria: the literature survey and the commonly accessible data. According to previous studies, input resources for the hotel industry include input materials such as staff, capital and equipment. These resources produce tangible and intangible services via front office and back office operations. Our analysis utilizes three input indicators: (1) total number of full-time employees in a regional hotel industry; (2) total number of guest rooms in the hotels in a region; (3) total fixed assets in a regional hotel sector. On the other hand, output is a concrete measurement that an organization uses to see if it reaches its objectives (Hwang & Chang, 2003). In our study, two output indicators for hotels' economic performance are chosen: (1) total revenue, which is the revenue generated by room occupancy, food and beverage service, and others such as laundry, lease of storage space, night clubs and service fees; and (2) average occupancy rate calculated by taking total occupied room-nights as a percentage of total available room nights.

The present study employs data from *The Yearbook of China Tourism Statistics 2006*, which covers relevant indices for 31 provincial regions in 2005, excluding Hong Kong, Macao and Taiwan. To compute the DEA efficiency measures, a software package named DEASolver: Professional Version 3.0 was used to analyze the data. This study takes two steps. The first step of the research is to evaluate the efficiency of the hotel industry at the regional level. The second step is built upon the results of the first step, which uses cluster analysis to define cluster membership of the 31 regional hotel sectors in China.

RESULTS: FIRST STEP

The descriptive statistics of the inputs and outputs are reported in Table 2. China is conveniently divided into three geographical zones: the Eastern (or coastal) zone including 11 regions, the Central zone consisting of ten regions, and the Western zone including ten regions. Accordingly, the DEA results are grouped by these three zones, depicting an overview on production efficiency of the Chinese hotel industry in 2005. (Due to the constraint of article length, detailed DEA efficiency measures are not reported here but they are available upon request.)

Table 2
Descriptive Statistics of the Variables, 2005

Variables	Units	Range	Mean	Standard deviation
<i>Inputs</i>				
Number of employees	Number	5,144-178,817	48,937.74	38,422.90
Guest rooms	Number	4,601-144,598	42,970.42	31,522.13
Fixed Assets	10000 RMB	93,518.03-6,109,022	1,211,626.98	1,337,439.18
<i>Outputs</i>				
Total revenue	10000 RMB	25,335.68-1,708,361.38	434,416.12	462,602.91
Average occupancy rate	%	39.76-75.02	59.14	6.87

Note: RMB is the official currency in China.

First, it is found that only three (namely, Shanghai, Tianjin and Ningxia) of the 31 regional hotel sectors obtain an OE score of 1.0, which represents the optimal allocation in input resource. By comparison, 28 DMUs' overall efficiency scores are smaller than 1.0, indicating that there is room for improvement in most regional hotel sectors. It shows that only two DMUs are considered DEA efficient in Eastern China. Among the ten regions in Central China, none of them is on the DEA efficient frontier. In particular, the overall efficiency score of Shaanxi is 0.428, which ranks at the bottom, indicating that given the same amount of inputs, the Shaanxi's hotel sector only produced outputs by 42.8% compared with that of an efficient hotel sector in Shanghai, Tianjin and Ningxia. In Western China, Ningxia's hotel sector is considered DEA efficient and it outperforms its counterparts.

Second, variation of pure technical efficiency reveals the diffusion of best-practice technology in the hotels' operation among 31 regions. Out of 31 regions, eight (26%) of them received a PTE score of 1.0, while 23 regions are relatively inefficient with a PTE score of less than 1.0. Specifically, Tibet's hotel industry is found to operate in the poorest level of pure technical efficiency devoid of scale efficiency, of which the PTE score is only 0.638.

Third, three regions (Tianjin, Shanghai and Ningxia) obtaining OE and PTE scores of 1.0 are found to achieve scale efficiency as well. This shows that the hotel sector within these regions operates at the constant return to scale size. That is, when changing all inputs (e.g., fixed assets, number of rooms or employees) by a positive proportional factor, the outputs (e.g., total revenue and room occupancy) within the regional hotel industry will increase by the same proportional change. In contrast, 28 (90%) of the 31 regions, with SE scores of less than 1.0, are found to be scale inefficient. This suggests that potential savings in input can be gained by adjusting operational scale in a regional hotel sector.

RESULTS: SECOND STEP

The DEA results provide specific benchmarks (i.e., OE, PTE and SE scores) or efficiency indices for the studied 31 regional hotel sectors. A general evaluation is warranted to identify differential levels of hotels' production efficiency in combination of the three indices. Cluster analysis is mostly used when there exists no prior hypothesis based on the underlying theory. Notably, cluster analysis is a well-known multivariate technique for grouping objects maximizing within-group homogeneity and between-group heterogeneity (Hair et al., 1998). Based on the DEA results of OE, PTE and SE scores, cluster analysis was executed using SPSS 15.0, when 31 regions were grouped into three easy-to-understand clusters by the K-means cluster method. Clusters of various efficiency levels of the Chinese hotel industry for year 2005 are shown in Table 3.

For Cluster 1 of high efficiency, nine regions are identified, including two eastern regions (Shanghai and Tianjin), four central regions (Hunan, Anhui, Henan and Shanxi), and three western regions (Guizhou, Qinghai and

Ningxia). These regions have excellent production efficiency in the hotel industry, compared with other regions in China. The average scores of OE, PTE and SE within Cluster 1 are above 0.95. This suggests that preference should be given to these regions when investors consider market entry strategy. Meanwhile, to government decision makers and DMOs of the nine regions, this indicates that the regional hotel industry is on the right track, and efforts should be made to maintain and enhance its efficiency.

Table 3
The Result of Cluster Analysis

Cluster	Cluster Members	Average OE	Average PTE	Average SE
Cluster 1: High efficiency regions (n=9)	Shanghai, Tianjin, Hunan, Guizhou, Anhui, Henan, Shanxi, Qinghai, Ningxia	0.950	0.998	0.952
Cluster 2: Medium efficiency regions (n=14)	Hebei, Shangdong, Inner Mongolia, Jiangxi, Hubei, Guangxi, Chongqing, Yunan, Tibet, Gansu, Xinjiang, Jiangsu, Zhejiang, Fujian	0.705	0.828	0.855
Cluster 3: Relatively low efficiency regions (n=8)	Liaoning, Hainan, Heilongjian, Jilin, Shaanxi, Sichuan, Beijing, Guangdong	0.539	0.836	0.645

Note: OE = overall efficiency; PTE = pure technical efficiency; SE = scale efficiency.

For Cluster 2 of medium efficiency, there are 14 regions representing five eastern regions (Hebei, Shangdong, Jiangsu, Zhejiang and Fujian), three central regions (Inner Mongolia, Jiangxi and Hubei), and six western regions (Guangxi, Chongqing, Yunan, Tibet, Gansu and Xinjiang). In general, regions in Cluster 2 have moderate efficiency scores between 0.7 and 0.9. It is shown that their overall inefficiency is mostly due to pure technical inefficiency. The implication for DMOs and hoteliers of the 14 regions is that they need to learn from the hotel sectors in Cluster 1 in terms of management and technical efficiency.

For Cluster 3 of low efficiency, eight regions are identified, including four eastern regions (Liaoning, Hainan, Beijing and Guangdong), three central regions (Heilongjiang, Jilin and Shaanxi), and one western region (Sichuan). Differing from Cluster 2 members, however, the overall inefficiency of these eight regional hotel sectors are mostly a result of scale inefficiency. Actually, the majority of the 31 regions have a situation of decreasing returns to scale, except Qinghai has increasing returns to scale. The implication for the government decision makers and DMOs is that they need to pay attention to the relationship between current industrial scale and tourism market share. Scale does not necessarily bring efficiency.

The above findings challenge the conventional wisdom that Eastern China generally outperforms in production efficiency, while Western China mostly operates in a less efficient manner. The findings show that Eastern regions account for 50% in the Cluster 3 of low efficiency. Another surprising finding is that major economic centers such as Beijing and Guangdong received quite low overall efficient scores, even though they rank near to the frontier in terms of pure technical efficiency. This means that their scale efficiency was quite low. One of the possible explanations for this is that the cost of operating at an incorrect industrial scale is very high. Based on hotel accommodation capacity, Guangdong and Beijing are the top 2 regions in China. Correspondingly, intensive competition and government regulations (e.g., land usage appraisal, environmental friendly regulation) made hotel operations in these regions more expensive. By comparison, certain Western regions such as Ningxia and Qinghai, are found to outperform most other regions in production efficiency of the hotel industry. The significance of this finding may lie in the revelation that these regions which are typically called the hinterlands with limited industrial inputs could provide opportunities for achieving high production efficiency, and for offering investors higher economic returns. The opportunities can be greatly enhanced considering the fact that the Chinese government has commenced a grand project called “The Western Region Development Strategy (WRDS)” since 1999, aiming to facilitate the economic development of the Western regions. Under this WRDS, tourism is designated as one of the primary drives in promoting economic development for the Western regions.

CONCLUSION AND DISCUSSION

The objective of this exploratory study is to evaluate the relative production efficiency of the regional hotel industry in China by using DEA. Based on the CCR and BCC models, this study incorporates multiple inputs (i.e. number of employees, guest rooms and fixed assets) and outputs (i.e. total revenue and average occupancy rate) in determining the relative efficiencies of the studied DMUs. Three differential levels of production efficiency in China's regional hotel sectors are identified by a cluster analysis. Some notable findings include the revelation that some eastern regions such as Beijing and Guangdong are found to face the problem of scale inefficiency, while certain western regions such as Ningxia and Qinghai appear to operate the hotel sector in a more efficient manner.

The findings of this exploratory study can be used as a reference for formulating market entry strategies as well as investment decisions. For DMOs and regional government policy makers, the findings will allow them to benchmark the best hotel industry's performance and offer policy or marketing guidelines for improving regional performance.

This study provides only a general view of the efficiency in regional hotel industry since it is exploratory in nature. Future studies should focus on specific types of hotels such as economy vs. luxury hotels or state-owned vs. private-owned hotels. Due to data availability, this research used only aggregated data at the regional level. DEA research using disaggregated and more pertinent hotel operation data might provide more insightful guidelines for hoteliers, DMOs and government decision makers. Studies can also be conducted to investigate how production efficiency of the Chinese hotel industry shifts over time. Finally, care needs to be taken in interpreting the outcome of the DEA approach, as there is no implication that a unit scored as 1.00 is necessarily highly efficient, just that it is "best in class." We recommend further studies to compare different scenarios of inputs and outputs in order to form more comprehensive knowledge of hotels' production efficiency.

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VALUATION OF INTANGIBLE ASSETS FOR PUBLICLY TRADED HOTEL FIRMS IN THE US

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ABSTRACT

This study provides value estimates for intangible assets of publicly traded hotel firms in the United States. When evaluating a firm's tangible and intangible assets, tests of model usefulness reveal that decomposing adjusted income (AI), measured by revenue minus expense, into adjusted income derived from intangible assets (AII) and adjusted income derived from tangible assets (AIT) releases incremental information to the market. Further, a significant difference exists for contributions from AIT and AII to a firm's market value of equity. Finally, it appears that the crude intangible valuation approach frequently employed by practitioners¹ systematically overestimates values of firm intangible assets.

INTRODUCTION

In general, current accounting and financial reporting practices in the US fail to capture a substantial portion of intangible assets (Aboody et al., 1998; Abrahams & Sidhu, 1998; Barth & Clinch, 1998; Goodwin, 2002; Lev & Zarowin, 1999; Lev, 2001a; Sougiannis, 1994). Under the current US Generally Accepted Accounting Principles (GAAP), almost all internally generated intangible assets must be expensed immediately (Financial Accounting Standards Board, 1974). However, there is one exception as the Statement of Financial and Accounting Standards (SFAS) NO. 86, allows companies to choose whether or not they capitalize software development costs from the point of "technological feasibility" FASB 1985. Many companies have chosen not to utilize this option (Lev, 2003). Examples include profitable companies like Microsoft and Oracle that do not capitalize software expenditures. The intangible asset accounting rules may be due to reliability and relevance concerns; however, expensing intangible assets immediately leads to lack of quantitative information about these assets on companies' financial statements and reports.

Moreover, a mature and regulated market for trading intangibles is nonexistent. Hence, no asset prices are available for use in deriving information about these intangible assets (Aboody & Lev, 2000). Other characteristics that render the intangibles assets more elusive are the high uncertainty associated with the future returns derived from these assets and the spillover and partial excludability effects of intangibles investments (Lev & Zarowin, 1999; Lev, 2001a). Regarding the spillover and excludability effects, non-owners can usually enjoy some of the benefits of investments in intangibles. A typical example is general employee training. When a firm invests in training its associates, other firms and even society at large will benefit from these investments if these associates change employers. Even under the legal framework, patented inventions have been frequently imitated by competitors before their expiration dates (Lev, 2001a).

Nevertheless, under US GAAP, publicly traded hotel firms' expense internally generated intangible assets immediately. For example, publicly traded hotel companies immediately expense expenditures on employee training, brand enhancement and software technology. However, benefits derived from these expenditures are recognized later and not matched with these previously expensed investments. Because there is uncertainty associated with these future benefits exists, "the fundamental accounting measurement process of periodically matching costs with revenues is seriously distorted, adversely affecting the informativeness of financial information" (Lev et al., 1999).

¹ The value of a firm's intangible assets equals its market value of equity plus liabilities minus book value of tangible assets.

Consequently, intangible assets are unreported on financial statements, and the future benefits derived from intangible assets are not matched with previously expensed investments in these intangible assets. Also, owners remain without security for future benefits of intangibles (Lev, 2001a), and no mature market exists for trading intangibles (Aboody et al., 2000). All these facts render finding a direct measure of intangibles for publicly traded hotel firms extremely difficult. Thus, no study in the hospitality industry has addressed the valuation issue of intangibles at the firm level.

However, it is possible to construct an indirect measure of intangibles for publicly traded hotel firms. We base our study on the aggregate production function developed by Solow (1957), which relies on the rationale that each individual hotel firm can be considered as an aggregated entity. We then develop a model that can serve as a starting point for calculation of the intangible value of publicly-traded lodging firms. In addition, this study discusses and tests usefulness and explanatory powers of models and procedures employed.

LITERATURE REVIEW

The main regulatory bodies in the world define intangible assets as non-physical and non-monetary sources of probable future economic profits accruing to the firm as a result of past events and transactions (Australian Accounting Research Foundation, 1989; International Accounting Standards Committee, 1998a). For example, the International Accounting Standards Committee defines intangible assets as “non-monetary assets without physical substance held for use in the production or supply of goods or services, for rental to others, or for administrative purposes, that are identifiable, controlled by an enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise” (International Accounting Standards Committee, 1998b). A recent definition provided by Lev (2001b), defines intangible assets as sources of future benefits that lack a physical embodiment, reasonably captures the essence of the definition for intangible assets. Therefore, this study follows Lev (2001b)’s definition.

Almost a century has passed since the beginning of the debate on how to account for and report intangible assets in the financial statements (Dicksee, 1987; Canibano et al., 2000). A theoretical basis for setting recognition and measurement criteria is the requirement before disclosing information on intangible assets. In general, accountants traditionally follow two income theories (Canibano et al., 2000). One, the transactions approach, investigated by Hodgson, Okunev and Willet (1993), builds accounting numbers by matching transaction costs in activities to produce activity costs. The other theory is the valuation approach, which relies on the assumption that true economic value associates with each element in the financial statements, and that true income is the estimate of the difference between the net value of the firm’s assets at two different points of time (Canibano et al., 2000).

Gu and Lev (2001), proposed a comprehensive valuation approach of enterprise intangibles and contend that “the problem of jointness of intangibles is mitigated when the objective is to place a combined value on all of the company’s intangibles, rather than on individual assets” (Lev, 2001a). Lev and Radhakrishnan (2004) employ a similar approach to estimate the value of organization capital. Nevertheless, these approaches suffer a major drawback. When the authors intentionally ignore all the intangible components in their regression models, they created omitted variable problems because intangibles are well known to interact with, and likely to highly correlate with other components in their models.

A crude approach frequently used by practitioners to estimate intangible assets is to take the difference between a firm’s market value and its book value of tangible assets. However, the resultant estimates shed no light on the connection between input and output measures, such as R&D expenditures and revenue. Moreover, this ignores the well-known interaction between tangible and intangible assets (Hendriksen & Breda, 1992). Furthermore, these estimates are likely to be affected by confounding effects, possibly introduced by market mispricing, as well as accounting practices governing intangible assets, such as goodwill and recognized intangibles. Therefore, the difference between market value and book value of a certain firm can, at best, provide a very noisy proxy for intangibles at certain points of time, and no comfortable inference can be drawn *ex ante*.

In the hospitality industry, three valuation approaches for intangibles at the property level have been proposed. One approach frequently used by practitioners considers hotel intangibles as equal to franchise and management fees (O’Neill, 2005). Another, developed by Belfrage (2001), values intangible assets based on hotel

premiums over market occupancy and average daily rate. The most recent approach, developed by O'Neill and Belfrage (2005), estimates hotel intangibles as the difference between sales attributable to franchise/brand distribution channels and the relative cost of affiliation. However, research done in the hospitality industry has mainly focused on one specific type of intangibles: intangibles related to franchise and management. Moreover, all hospitality research approaches the intangibles valuation issue at the property level. Little guidance exists for investors interested in firm level valuation of intangibles. Considering the significant role intangibles play in the US hospitality industry, models that can reliably estimate the value of intangibles are invaluable for all interested parties, such as industry practitioners, investors, researchers, regulators and creditors.

RESEARCH DESIGN

Direct accurate measures of intangible assets are difficult to determine due to lack of relevant and reliable information in companies' financial statements and reports. Therefore, we propose a four-step indirect measure of intangibles in this paper. The initial consideration is that each hotel firm is an aggregated entity. In so doing, the aggregate production function developed by Solow (1957) can identify technical changes/intangibles changes. In the second step, revenue derived from tangible assets (REVT) is estimated based on a regression of intangibles-change adjusted revenue on tangible assets and total employee working hours for each firm. REVT is deducted from total revenue to arrive at revenue stemming from intangible assets (REVI). To empirically match revenue with expense, decomposing expense follows the same scheme employed for revenue decomposition to arrive at estimates of expenses associated with tangible assets (EXPT) and expenses associated with intangible assets (EXPI). Third, by taking the differences between REVT and EXPT and between REVI and EXPI, we have adjusted income derived from tangible (AIT) and intangible assets (AII). AIT and AII are used to decompose market value of equity into tangible and intangible components for each hotel firm in the sample according to an estimation model adapted from Ely and Waymire (1999) and Ohlson (1995). Finally, we estimate total values of intangible assets with the assumption that firms apply uniform capital structure across intangible and tangible assets. A significant body of previous study in the area of optimal firm capital structure exists (e.g., Ruland and Zhou, 2005; Leland and Toft, 1996); however, it appears that no study shows that the composition of tangible and intangible components of a firm systematically affect the capital structure choice. Therefore, in this study, the assumption is that a firm will choose its optimal capital structure based on factors other than the composition of tangible and intangible assets, and apply the chosen capital structure uniformly across its tangible and intangible assets. All financial variables are adjusted to 2005 dollars based on Consumer Price Index (CPI).

MODELS, VARIABLES OF INTEREST AND SAMPLE

Although employing the aggregate production function does require time-series data and an assumption that the relevant factors are paid their marginal products, "the price may not be unreasonably high" considering the assumption is often made in the economics literature (Solow, 1957). Moreover, invoking the aggregate production function to address the valuation issue of intangibles in the US hospitality industry enjoys three advantages: (1) by focusing on the hospitality industry, data collected are likely to be homogeneous, (2) the hospitality industry highlights the importance of service providers and fixed assets, and (3) the hospitality industry is highly competitive and sensitive to the movements in the market (Miles, 1993; Tether & Metcalfe, 2002; Tether, Hipp, & Miles, 2001). This provides a natural setting for the aggregate production function.

Based on Solow (1957), if Q represents output, K capital inputs and L labor inputs in "physical" units, respectively, then the aggregate production function can be written as:

$$Q = F(K, L; t) \tag{1}$$

Solow (1957) uses t for time in F to allow for technical changes, which he uses as "a shorthand expression for any kind of shift in the production function". Therefore, it is a catchall measure that captures slowdowns, speedups, improvements in the education of the labor force and all sorts of other things not incorporated in K and L . Consequently, in this study technical changes' effects are equivalent to intangibles' effects (henceforth, "intangibles' effects" and "technical changes' effects" are interchangeable). Furthermore, if shifts in the production function leave marginal rates of substitution unchanged, but only increase or decrease the output attainable from given inputs

(neutral technical change assumption), equation (1) can take the special form as shown in (1a) and operationalized in (1b).² Please note that we have suppressed time subscripts for ease of presentation.

$$Q = A(t)f(K, L) \quad (1a)$$

$$\ln q = \ln \alpha + \beta \ln k + \ln \varepsilon \quad (1b)$$

where q is the output per man hour, and k is the capital per man hour in Solow (1957). This leaves the intercept to capture the cumulative effects of intangibles.

Because both revenue and expense streams are affected by intangibles' effects, a separate estimate of the following two regressions for intangibles' effects associated with revenue and expense streams allows parsing intangibles' effects during analyses. These estimations establish the foundation for the follow-up empirical matching of revenue and expense net of intangibles' effects:

$$\ln rev = \ln \alpha_r + \beta_r \ln ta + \ln \varepsilon \quad (2a)$$

$$\ln exp = \ln \alpha_e + \beta_e \ln ta + \ln \varepsilon \quad (2b)$$

where rev is estimated by revenue divided by total working hours (the number of employees times the annual average working hours per employee) for each hotel firm; exp is estimated by total expense divided by total working hours (the number of employees times the annual average working hours per employee) for each hotel firm,

and ta is estimated by tangible assets divided by total working hours. This leaves α_r and α_e to capture the cumulative intangibles' effects associated with revenue and expense, respectively. Let $A_r(t)$ and $A_e(t)$ with subscripts of r and e distinguish intangibles' effects associated with revenue from those associated with expense. Arguably tangible assets' contributions to revenue, as well as their impacts on expense, are constant over time after

parsing impacts from intangible assets. Therefore, based on Solow (1957), $\frac{\Delta rev}{rev} - \hat{\beta}_r \frac{\Delta ta}{ta}$ and $\frac{\Delta exp}{exp} - \hat{\beta}_e \frac{\Delta ta}{ta}$ are estimates of $\frac{\Delta A_r(t)}{A_r(t)}$ and $\frac{\Delta A_e(t)}{A_e(t)}$, respectively. Arbitrarily setting $A_r(t)$ and $A_e(t)$ equal to 1, where t is the earliest year of a firm in the sample, and using the fact that, in general,

$A(t+1) = A(t)(1 + \frac{\Delta A(t)}{A(t)})$, we can reconstruct $A_r(t)$ and $A_e(t)$ time series for each firm, and name them Intangible Index (1) and (2), respectively.

To reiterate, in general, equation (1a) is $Q = A(t)f(K, L)$; after reconstructing A(t) time series, we can parse impacts of intangible assets on revenue and expense by estimating the following regressions for each firm in the sample, thus rendering possible the empirical matching of revenue with expense net of intangibles' effects for follow-up analyses:

$$\frac{REV}{A_r(t)} = f(K, L) \quad (3a)$$

$$\frac{EXP}{A_e(t)} = f(K, L) \quad (3b)$$

² Proof is not provided due to space constraints.

where REV and EXP are revenue and expense, respectively; K and L are tangible assets on book and total working hours, respectively. Choosing the frequently used Cobb-Douglas production function for f allows obtaining estimates of revenue derived from, as well as expense associated with, K and L net of intangibles' effects. Specifically for each firm in sample (t is the time subscript for year):

$$\frac{REV_t}{A_r(t)} = K_t^\gamma L_t^\phi \varepsilon_t \quad (4a)$$

$$\frac{EXP_t}{A_e(t)} = K_t^\tau L_t^\theta \nu_t \quad (4b)$$

We estimate parameters in (4a) and (4b) using natural logarithm and an intercept, thus:

$$\ln \frac{REV_t}{A_r(t)} = \ln \lambda + \gamma \ln K_t + \phi \ln L_t + \ln \varepsilon_t \quad (5a)$$

$$\ln \frac{EXP_t}{A_e(t)} = \ln \delta + \tau \ln K_t + \theta \ln L_t + \ln \nu_t \quad (5b)$$

After getting estimates of γ , $\hat{\gamma}$, as well as τ , $\hat{\tau}$, we estimate revenue derived from tangible assets net of intangible effects of a firm in year t (REVT) by calculating $K_t^{\hat{\gamma}}$; while expense associated with tangible assets net of intangibles' effects of a firm in year t (EXPT) by computing $K_t^{\hat{\tau}}$. Next by deducting $K_t^{\hat{\gamma}}$ ($K_t^{\hat{\tau}}$) from the total revenues (expenses) of a firm in year t , we have revenue stemming from (REVI) as well as expense associated with intangible assets (EXPI) for a firm in year t .

Next, by taking the difference between REVT and EXPT, we have adjusted income derived from tangible assets net of intangibles' effects (AIT). Similarly, the difference between REVI and EXPI gives adjusted income derived from intangible assets (AII).

Next, by estimating the equation (6) from Ely and Waymire (1999) and Ohlson (1995):

$$MV_{i,t} = \beta_0 + \beta_1 BVT_{i,t} + \beta_2 BVI_{i,t} + \beta_3 AIT_{i,t} + \beta_4 AII_{i,t} + \varepsilon_t \quad (6)$$

we have,

$$VT_{i,t} = \hat{\beta}_1 BVT_{i,t} + \hat{\beta}_3 AIT_{i,t} \quad (7)$$

$$VI_{i,t} = MV_{i,t} - VT_{i,t} \quad (8)$$

where

$\hat{\beta}_1, \hat{\beta}_3$ are estimated from (6).

$VI_{i,t}$ = The intangible component of MV for firm i in year t .

$VT_{i,t}$ = The tangible component of MV for firm i in year t .

$MV_{i,t}$ = Market value of equity for firm i in year t , adjusted based on Consumer Price Index to 2005 dollars.

$BV_{i,t}$ = Total assets (data6) – Total liabilities (data181), for firm i in year t , adjusted based on Consumer Price Index to 2005 dollars.

$BVI_{i,t}$ = (Recognized intangibles + Goodwill + Other intangibles)*(1-L/(FMV)), where FMV is the sum of MV and L, for firm i in year t , adjusted based on Consumer Price Index to 2005 dollars.

$BVT_{i,t} = BV_{i,t} - BVI_{i,t}$, for firm i in year t .

$AIT_{i,t}$ = Adjusted income derived from tangible assets for firm i in year t , measured as $REVT_{i,t} - EXP_{i,t}$.

$AII_{i,t}$ = Adjusted income derived from intangible assets for firm i in year t , measured as $REVI_{i,t} - EXP_{i,t}$.

The final estimation of the total value of intangible assets is by $VI/(1-L/FMV)$, assuming firms apply uniform capital structures across their tangible and intangible assets.

The key question now turns to whether this procedure, proposed thus far, is meaningful. In other words, if the contribution to the market value of equity from AIT is identical to that from AII, no need exists to decompose AI, adjusted income defined as revenue minus expense,³ based on its sources. To test this, we have the following hypothesis, in null form, for the regression equation (6).

H01: No difference exists in the contributions to the market value of equity from AIT and AII, i.e., $\beta_3 = \beta_4$.

Testing of H01 is carried out by creating a new parameter, α , which equals to $\beta_3 - \beta_4$. Replacing β_3 in equation (6) with $\alpha + \beta_4$ provides a direct test of whether α is significantly different from zero (Greene, 2003), in other words, whether H01 holds.

Moreover, regression (9) and (10) can be estimated and the resulting adjusted R-square values compared to show if decomposing AI provides incremental explanatory power. Our second null hypothesis is:

H02: No incremental information release occurs based on the decomposition of AI into AIT and AII, i.e., the adjusted R-square from (9) \geq the adjusted R-square from (10):

$$MV_{i,t} = \beta_0 + \beta_1 BV_{i,t} + \beta_2 AI_{i,t} + \varepsilon_t \quad (9)$$

$$MV_{i,t} = \beta_0 + \beta_1 BV_{i,t} + \beta_2 AIT_{i,t} + \beta_3 AII_{i,t} + \varepsilon_t \quad (10)$$

Data to estimate equations (2a), (2b), (5a), (5b), (6), (9) and (10) are collected from COMPUSTAT Industrial Annual and the March Supplements of The Current Population Survey (CPS) by the Bureau of Census of the Bureau of Labor Statistics from 1963 to 2005. Financial data and the number of employees are collected from COMPUSTAT Industrial Annual for publicly traded hotel firms (SIC codes 7000, 7010, and 7011). Tangible assets (K) are calculated from deducting recognized intangibles, goodwill and other intangibles from total assets. The number of employees multiplied by the annual average working hours per employee for the hospitality industry, collected from CPS, is used to proxy for employee total working hours per year (twh).

EMPIRICAL RESULTS

Based on available data from COMPUSTAT Industry Annual, a total number of 470 firm-year observations constitute the collected data from 1963 to 2005 for 27 publicly traded, active and inactive, hotel firms (Table One). Considering that decomposing REV and EXP based on the aggregate production function requires an estimation of

³ AI = AIT + AII by definition.

three parameters employing time-series data, we place a restriction on the data selection by setting the minimum number of firm-year observations to be 10 for each firm included in the sample. This ensures a reasonable sample and variability for the estimation. However, majority of the firms included in the sample have more than twenty firm-year observations⁴.

Based on Solow (1957), revenue is decomposed by running a firm-specific, time-series regression (5a). To reiterate, by estimating (5a) firm by firm, firm-specific $\hat{\gamma}$ can be attained. Thus, revenue derived from tangible assets is attained by calculating $K_t^{\hat{\gamma}}$ and revenue derived from intangible assets by total revenue minus $K_t^{\hat{\gamma}}$.

Table 1
Sampled Firm Names and the Number (N) of Firm-year Observations for the Firm-Specific Regression (5a).

N	Company Name
11	ATLAS HOTELS INC
13	DIVI HOTELS NV
13	FABULOUS INNS OF AMERICA
20	FOUR SEASONS HOTELS -LTD VTG
15	GAYLORD ENTERTAINMENT CO
43	HILTON HOTELS CORP
26	HOLIDAY CORP
12	HUDSON HOTELS CP
12	INTEGRA A HOTEL & REST
17	INTERCONTINENTAL HOTELS -ADR
22	INTL LEISURE HOSTS
25	KAHLER CORP
11	KAMPGROUNDS OF AMERICA
33	LA QUINTA CORP
26	LA QUINTA INNS INC
30	LODGIAN INC
13	NORTHVIEW CORP
15	PEEK'N PEAK RECREATION INC
30	PRIME HOSPITALITY CORP
17	RIDGEWOOD HOTELS INC
41	SONESTA INTL HOTELS -CL A
31	SOUTHERN INVT SERVICES INC
31	STARWOOD HOTELS & RESORTS WRLD
27	SWISS CHALET INC
20	THOUSAND TRAILS INC
28	UNITED INNS INC
28	WESTERN STANDARD CORP

To empirically match revenue and expense, based on their common source of tangible and intangible assets after parsing intangibles' effects, total expense is decomposed based on (5b). Expense associated with tangible

⁴ Sensitivity tests excluding firms with less than 15 or 20 firm-year observations do not qualitatively affect results from regression (6).

assets is calculated by $K_t^{\hat{t}}$, and expense associated with intangible assets by total expense minus $K_t^{\hat{t}}$. A general high fit is observed for sampled firms for revenues and expenses (results not reported due to space constraints).

Utilizing results from equations (5a) and (5b), we decompose revenue and expense based on their sources, namely, tangible and intangible assets. Taking the difference between REVT and EXPT, we have an estimate of adjusted income derived from tangible assets; similarly, REVI minus EXPI gives adjusted income derived from intangible assets. Table Two presents the summary statistics for the final sample used to estimate regression (6), the main model for intangible valuation. The sample size deflates to 445 firm-year observations. Some of the sampled firms during certain years show negative net book values, indicating their high leverage. Overall, these sample firms span a wide range of size, profitability, and leverage levels, as implied by minimum and maximum values of these corresponding variables.

Table 2
Summary Statistics for Variables Used to Estimate Regression (6) (in Millions of Dollars Except for N).

Variable	N	Mean	Std. Dev.	Minimum	Maximum
MV	445	872.98	2085.00	0.15	12668.00
L	445	726.49	1703.00	0.0470	11718.00
BV	445	488.31	1274.00	-769.95	8425.00
BVT	445	426.45	1155.00	-750.04	8104.00
BVI	445	61.85	259.81	-38.09	1981.00
AI	445	4.37	218.45	-2783.00	719.00
AIT	445	113.94	345.03	-385.24	2267.00
AII	445	-109.57	320.46	-2770.00	380.95

Note:

MV = Market value of firm i in year t , computed as the product of price (data199) and common shares outstanding (data54) from COMPUSTAT Industrial Annual, adjusted based on Consumer Price Index to 2005 dollars.

L = total liabilities (data181).

BV = Total assets (data6) – Total liabilities (data181), for firm i in year t , adjusted based on Consumer Price Index to 2005 dollars.

BVI = (Recognized intangibles (data33) + Goodwill (data204) + Other intangibles (data352))*(1 - L/FMV) for firm i in year t , where FMV is the sum of MV and L, adjusted based on Consumer Price Index to 2005 dollars.

BVT = BV – BVI, for firm i in year t .

AI = REV – EXP, where REV and EXP are as previously defined;

AIT = adjusted income derived from tangible assets, calculated as REVT – EXPT, where REVT equals revenue derived from tangible assets for firm i in year t and EXPT equals expense associated with tangible assets for firm i in year t , both estimated from the previous section based on regression (5a) and (5b).

AII = adjusted income derived from intangible assets, calculated as REVI – EXPI, where REVI equals revenue derived from intangible assets for firm i in year t and EXPI equals expense associated with intangible assets for firm i in year t , both estimated from the previous section based on regression 5(a) and 5(b).

MV DECOMPOSITION

Table Three presents results from equation (6), the main valuation model. White's (1980) tests reveal signs of heteroscedasticity; therefore, standard errors are adjusted based on White (1980) and reported with corresponding t-values. All parameter estimates are significant at the 5% level and with expected signs. In general, an increase in assets and benefit streams, BVT, BVI, AIT and AII in this study, lead to higher market value (Ohlson, 1995).

Table Three
The Regression (6) Results.

Variable	Estimate	S.E.	t-Value (w)	Pr > t	VIF	Adj. R-Sq.
Intercept	81.4438	41.1728	1.9800	0.0485	0.0000	0.8573
BVT	1.3914	0.0506	27.4800	<.0001	2.4496	
BVI	1.7176	0.2131	8.0600	<.0001	2.1938	
AIT	1.0245	0.2354	4.3500	<.0001	4.7235	
AII	0.2262	0.0786	2.8787	0.0042	5.7055	

Note:

Estimate: Parameter estimates.

S. E.: standard error.

(w): White (1980) adjusted errors and associated *t* values.

VIF: variance inflation factor.

Adj. R-Sq.: adjusted R-square.

All variables are defined as in table one.

To consider the possibility of the multicollinearity issue, variance inflation factors are calculated and reported. As shown in Table Three, there are moderate amounts of multicollinearity associated with AIT and AII. However, this is not likely to pose serious problems with parameter estimation, because multicollinearity (if not perfect multicollinearity) among included independent variables will not bias parameter estimates (Greene, 2003). Adjusted R-square is 85.73%, indicating a very high model explanatory power. Subsequent tests of auto-correlation for five lags did not reveal any significant relationships.

HYPOTHESES TESTING

Testing of Hypothesis One (H01) reveals significant difference between AIT and AII, indicating decomposition of AI into AIT and AII is a meaningful process. Specifically, the coefficient associated with AIT in Table Four is significantly greater than zero at all reasonable levels, indicating the coefficient associated with AIT is significantly greater than that associated with AII.

Table Four
Test Results for Hypothesis One.

Variable	Estimate	S.E.	t-Value (w)	Pr > t	VIF	Adj. R-Sq.
Intercept	81.4438	41.1728	1.9800	0.0485	0.0000	0.8573
BVT	1.3914	0.0506	27.4800	<.0001	2.4496	
BVI	1.7176	0.2131	8.0600	<.0001	2.1938	
AIT	0.7983	0.1845	4.3300	<.0001	2.9008	
AI	0.2262	0.0786	2.8787	0.0042	2.6514	

Note:

All variables are as previously defined.

Hypothesis Two (H02) testing employs regression (9) and (10). Results are reported in Table Five (Panels A & B). As indicated by the increase in the adjusted R-square from regression (9) to regression (10) from 83.79% to 85.70%, incremental information is released to and used by the market when decomposing AI into AIT and AII. Further, this increase in the adjusted R-square implies that the decomposition of AI is a meaningful and necessary exercise for intangibles valuation. Lastly, as indicated by the adjusted R-squares of 85.73% from Table Three and 85.70% from Table 5, panel B, decomposing BV into BVT and BVI does not provide substantial incremental information content. This is not surprising because BVT and BVI are pieces of information publicly available just the same as BV, and the market is able to impound them into the price.

Table Five

Panel A: Regression (9) Results						
Variable	Estimate	S.E.	t-Value	Pr > t 	VIF	Adj. R-Sq.
Intercept	87.8980	42.0660	2.0900	0.0372	0.0000	0.8379
BV	1.5956	0.0337	47.3500	<.0001	1.2369	
AI	1.3621	0.1965	6.9300	<.0001	1.2369	
Panel B: Regression (10) Results						
Variable	Estimate	S.E. (w)	t-Value (w)	Pr > t 	VIF	Adj. R-Sq.
Intercept	73.8487	40.8710	1.8100	0.0715	0.0000	0.8570
BV	1.4221	0.0458	31.0300	<.0001	2.4336	
AIT	1.2177	0.1924	6.3300	<.0001	3.1463	
AII	0.3107	0.0725	4.2855	<.0001	5.4454	

Note:

AI = REV – EXP, where REV equals data12 and EXP is the calculated sum of Depreciation and amortization expense (data14), Cost of goods sold (data41), Rental Expense (data47), Labor and Related Expense (data42) + Pension Service Cost (data331) + Advertising Expense (data45) + Selling, General and Administrative Expense (data189) from COMPUSTAT Industrial Annual.

Other variables are as defined in Table Two.

FINDINGS

As a first step into exploring the valuation issue of intangible assets at the firm level in the US hospitality industry, this study provides value estimates mainly from a time-series perspective. Based on resultant estimates of intangible assets, it appears that intangible assets play a decisive role in deciding whether a hotel firm survives or not. Moreover, for those hotel firms that survive, intangible assets generally play a dominant role. In addition, firms' strategic response to a drastic event, i.e., 9-11, is to conservatively endure the loss, as seen by inspecting value changes of intangible assets surrounding the year of 2001.

Furthermore, when evaluating a firm's tangible and intangible assets, tests of model usefulness reveal it is meaningful to decompose adjusted income (AI) (measured by revenue minus expense in this study) into adjusted income derived from intangible assets (AII), and adjusted income derived from tangible assets (AIT). Specifically, a significant difference exists for contributions from AIT and AII to a firm's market value of equity. Further, decomposing AI into AIT and AII releases incremental information to the market.

Finally, by comparing the value estimates, based on the crude approach frequently employed by practitioners and those from the models proposed in this study, findings indicate the crude approach systematically overestimates hotel firms' intangible assets, when the assumption is application of a uniform capital structure across tangible and intangible assets within a firm. These results were not reported due to space constraints.

IMPLICATIONS

This study provides total value estimates for hotel firms' intangible assets, which can serve as a vital piece of information for appraisers, investors, creditors, managers, as well as other parties of interest. For example, appraisers complain that no consensus estimates of "total intangible assets" is available, which makes the appraisal process "trickier" (Henry, L. E., 2004). This may be due to certain reliability concerns, considering no theoretical model with high explanatory power is readily available for appraisers to produce consistent value estimates of intangible assets. Moreover, investors and creditors cannot objectively judge the strategic shift maneuvered by managers without knowing the composition of a firm's tangible and intangible assets; thus, introducing higher risks to investment decisions. Even managers, who are responsible for guiding the direction of a company's future, can only rely on vague feedback from the market to fine tune their managerial decisions without a reasonable estimate of their company's intangible assets. This study provides a model and a systematic way to calculate the intangible

value of publicly traded hotel firms, thereby rendering possible consensus value estimates for hotel firms' intangible assets.

Moreover, the methodology employed in this study has additional application for the property level, where each property is considered as an aggregate entity. It is highly likely that reliable and consensus estimates are achieved and valuable guidance provided at the property level, considering equivalent and even more accurate data are available for insiders. Along the same line of reasoning, managers of publicly traded hotel firms are able to improve their decisions related to investments in intangible assets because they have access to accurate firm specific data to execute the models proposed in this study. For outsiders, employing the models proposed in this study to estimate values of intangible assets for hotel firms will facilitate investment decision making processes by improving the information set available.

FUTURE RESEARCH

To improve estimates from the procedures proposed in this study, further research needs to be done in the area of firms' capital structure choices. In this study the assumption is that firms apply uniform capital structures across their tangible and intangible assets. However, it might be the case that some firms deviate from that assumption, therefore, necessitating further study.

Moreover, identifying cost of capital associated with tangible and intangible assets is interesting. Perhaps, the cost of capital differs for the two different kinds of assets, considering they may have different risk characteristics. In addition, when estimating value estimates for intangible assets, their contribution patterns to firms' value, over time, can be identified; thus offering implications for investment portfolio construction. Similarly, future studies along the same line are likely to reveal the reasons for systematically undervaluing hotel firms as suggested by Lee, S. and Upneja, A. (2007).

Finally, this study does not distinguish between contributions of supervisors from those of line associates when employing the proxy of total working hours for human capital. Supervisors' contributions are likely different from line associates with regard to a firm's value, considering the former have different training and are likely to have certain expertise in their working areas. Further study of this issue might reveal interesting results.

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CUSTOMERS' HEALTH PERCEPTIONS OF SELECTED FAST FOOD RESTAURANTS ACCORDING TO THEIR NUTRITIONAL KNOWLEDGE AND HEALTH CONSCIOUSNESS

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ABSTRACT

The purpose of this study is to examine customers' health perceptions on fast food restaurants' menu items, according to their nutrition knowledge and health consciousness. The finding indicates that there is a difference between the results of respondents' most favorite fast food restaurants and their health perceptions on fast food restaurants' menu items. In addition, although there were not significant differences for all fast food restaurants, generally, respondents who have high nutrition knowledge scores and high health consciousness were more critical than those who have low nutrition knowledge scores and low health consciousness with regard to the ratings of fast food restaurants' menu items. Gender differences were also noted.

Key Words: fast food menu items, health perceptions, health consciousness, nutrition knowledge

INTRODUCTION

A major trend in Americans' eating habits is to eat more outside the home (McNeal, Stem, & Nelson, 1980). As disposable incomes rise, time for cooking becomes scarce, and eating outside becomes more affordable, Americans are eating outside the home more than ever (Lin & Frazao, 1997). Putnam and Allshouse (1996) articulated that in the early 1970s, approximately 20% of the household food dollar was spent on eating away from home. However, by 1995, about 40% of the US household food dollar was spent on eating outside the home. In addition, according to data from the United States Department of Agriculture (2007), the ratio of food away home of total food dollars was 48.5% in 2004, 48.6% in 2005, and 48.9% in 2006. In this trend, fast food is a growing component of the Americans' eating habits. For instance, the sales of fast food occupied 4% of total sales of eating outside from home in 1953, but this rate increased to 34% of dining out food sales in 1997 (USDA Continuing survey of food intakes by individuals during 1994-1996, 1997; Putnam & Allshouse, 1996). According to a report from USDA (Stewart, Blisard, Bhuyan, & Nayga, 2007), fast food restaurants have captured 37.9 % of total dining sales in 2002.

Through many researches and media report about the unhealthy nature of fast foods, American people have developed a taste for fast foods. Americans have an increased interest for nutrition in fast food, as they have become more health conscious (Kara, Kaynak, & Kucukemiroglu, 1997). Kara et al. (1997) claimed that the trend is that consumers want low calorie, and light and low fat menu items. In this situation, marketers who manage fast food restaurants need to understand how their customers think of their menu items. Thus, the first step marketers should go through is to investigate consumers' perceptions of fast food menu items served by their restaurants. This is an important step to respond to consumers' new demands with respect to the increased health consciousness.

Although Americans' interests in nutritional aspects of fast food meals have been increasing, and they have become more health conscious than ever, only a few studies have been conducted about consumers' perceptions on fast food menu items in terms of their nutrition knowledge and health consciousness. McNeal et al.'s study (1980) competently documents consumers' perceptions on fast foods. The authors attempted to examine consumers' perceptions on fast food menu items and applied consumers' nutrition knowledge to analyze their perceptions. They sought to find a difference of perception on fast foods between respondents who have high and low nutrition knowledge. However, they did not assess consumers' perceptions based on their health consciousness. Thus, this study will examine consumers' health perceptions on fast food menu items using their health consciousness as well as nutrition knowledge.

RELATED LITERATURE

A few studies have been conducted about consumers' perceptions of fast food meals (McNeal, Stem, & Nelson, 1980) and fast food restaurants and their menu items (Kara, Kaynak, & Kucukemiroglu, 1997).

McNeal et al. (1980) conducted a study to examine nutritional perceptions of selected fast food meals based on customers' different socioeconomic backgrounds and different nutritional knowledge levels. They assessed customers' overall nutritional ratings of specific and general fast food meals. They also investigated customers' ratings on caloric content, harmful additive content and the perceived value for price of fast food meals. Interestingly, the upper socioeconomic groups and the high nutrition I. Q. group were more critical in rating the meals than their counterparts. The finding supports the fact that people eat fast food meals for reasons such as taste, convenience, and price, but not nutrition. Based on this, the authors concluded that customers assume either that fast food meals are nutritious or that nutrition is not an important factor in the selection of fast food meals.

Kara et al.' study (1997) was to analyze consumer perceptions of, and preferences for, fast food outlets in the USA and Canada. The study investigated customers' perceptions of different fast food outlets in the USA and Canada in terms of certain multi-attribute criteria and differences between US and Canadian consumers' perceptions of, and preferences for, different fast food outlets and menu items. They found that there are differences between US and Canadian consumers with respect to the relationship between frequency of purchase and attributes considered important.

Some studies investigated gender differences with respect to health- enhancing behaviors, nutrition knowledge, and the level of interest in health issues. Bogue, Coleman, and Sorenson (2005) conducted a study to examine Irish consumers' attitudes to diet, health, and health-enhancing foods. Their finding indicated that female respondents obtained much better scores on nutrition knowledge questions than male respondents. In addition, Female respondents were more likely to consume fish, fruit, and vegetables every day and realized more associated health benefits than male respondents. The authors also found that participants who were knowledgeable about food and nutrition were concerned about their own health.

Females were most receptive to health promotion campaigns and health-enhancing food advertisements (Bogue & Sorenson, 2001), tended to comply much more with dietary recommendations than males (Monneuse, Bellisle, & Koppert, 1997; Turrell, 1997), and had more interest in diet and health issues than males (Monneuse et al., 1997). Women tended more to avoid high-fat foods, eat fruit and fiber, and attach greater importance to healthy eating than men (Wardle et al., 2004).

METHOD

Participants

The participants of this study were senior and junior undergraduate students who take Hotel and Restaurant Management as their majors in a University in the eastern part of the United States. The data for this study were collected through self-administered questionnaires. Survey questionnaires were distributed to 170 students in their classes. Among the 170 questionnaires, three were discarded because they were incomplete or contained ambiguous information. Thus, 167 usable questionnaires were used for analysis.

Measurement

The questionnaire for the survey was composed of five parts. The first part was made up of questions to measure consumers' behaviors related to eating outside the home, going to fast food restaurants, and selecting menu items in the fast food restaurants. The second part consisted of questions to examine respondents' health perceptions of fast food menu items. The question was phrased as "Please rate the next fast food restaurants according to how healthy you consider these restaurants' menus." A 7-point Likert-type scale that ranged from 1 (not very healthy) to 7 (very healthy) was used. The fast food restaurants were selected based on a report from Nation's Restaurant News (2007). The report ranked chain restaurants on the basis of their foodservice sales. The second part also included questions asking respondents about the reasons why they rated each restaurant the way they did. The third part was comprised of questions to measure the level of respondents' health consciousness. These included questions asking the extent to which the respondents consider nutrition, calories, and fat contents when they select menu items in fast food restaurants. A 7-point Likert-type scale that ranged from 1 (don't consider) to 7 (consider very much) was employed. The fourth part was made up of questions to measure respondents' nutrition knowledge. The questions to

measure nutrition knowledge were obtained from Nutrition for Foodservice and Culinary Professionals (Drummond & Brefere, 2004). This book contained several question sets. Among them, twenty questions were randomly selected. The last part consisted of questions asking respondents' demographic information, their cooking behaviors, and nutrition courses they took in middle or high school and in college.

Instrument Test

A pilot test was performed to verify content validity. This test was conducted toward undergraduate students. Thirty students participated in the pilot test. After filling out the questionnaire, the respondents were interviewed about understandability and readability of the questionnaire. Most respondents understood the content of the questionnaire. Only a few parts were amended to improve the measurement reliability.

A reliability test was used to assess the degree of internal consistency between variables. Internal consistency of variables means that individual items of the scale should be assessed the same construct and thus be highly intercorrelated (Nunnally, 1978). The pilot test was used to assess the internal consistency of the constructs. Sekaran (1992) claimed that the coefficient alpha is the most popular measure of reliability for a multi-item scale. Cronbach's alphas were computed to measure the internal consistency of the measuring scales. The alpha coefficients for the two variables, such as consumers' health perceptions of fast food menu items and their health consciousness, were .876 and .892 respectively. The coefficients for the scales exceed the minimum standard for reliability of 0.7 suggested by Nunnally (1978) for basic research. Thus, the results showed that these multiple measures are highly reliable for the measurement of each construct.

RESULTS

One-way analysis of variance was used to determine the nature of relationships between the independent variable and the dependent variable. To use one-way ANOVA, two assumptions should be met. First, the dependent variable should have a normal distribution across the levels of the independent variable. Second, there should be equal variance in the dependent variable across the levels of the independent variable. To check the normal distribution of the dependent variable, skewness values were used. The skewness values were between -1.0 and +1.0. Huck (2000) reported that "skewness is not considered to be too extreme if the coefficient of skewness assumes a value anywhere between -1.0 and +1.0" (p. 34). To determine if the equal variance assumption was met, the Levene's test was used. The Levene's tests indicated that the equal variance assumption was violated in a few variables. Thus, in those cases, the results of Welch test were employed. According to Luh and Guo (1999), approximate tests are famous alternatives for handling with the problem of heterogeneous variances. They described that "the Welch test (Welch, 1951) is the most valid test under conditions of heterogeneity investigated" (Dijkstra & Werter, 1981; Wilcox, 1989: 304). The results of the Welch test were all acceptable.

With regard to examining respondents' health perceptions of fast food restaurants' menu items, Subway ($M = 5.90$), and Quiznos ($M = 4.93$) had considerably higher values than other fast food restaurants (refer to Table 1).

Table 1
Health Perceptions of Fast food Restaurants' Menu Items

Fast food Restaurants	n	M	SD	Range	
				Low	High
McDonald's	167	2.43	1.26	1.00	5.00
Burger King	165	2.36	1.10	1.00	6.00
Wendy's	166	3.23	1.38	1.00	6.00
KFC	165	2.18	1.16	1.00	6.00
Chick-fil-A	158	3.35	1.43	1.00	6.00
Popeyes	138	2.36	1.21	1.00	5.00
Subway	167	5.90	.79	3.00	7.00
Quiznos	161	4.93	.99	1.00	7.00
Taco Bell	165	2.56	1.27	1.00	6.00
Del Taco	90	2.47	1.26	1.00	5.00
Long John Silver's	130	2.55	1.35	1.00	7.00

In terms of questions asking why respondents rated each restaurant the way they did, most respondents indicated that Subway has many healthy options, such as wheat breads and veggie choices. They also mentioned that Subway's meals contain low calories, low fat contents, and healthy ingredients. Respondents described that Quiznos also provide healthy choices, and their meals include healthy ingredients like low fat contents. However, a fair number of respondents stated that Quiznos' menu items are less healthy than those of Subway. They explained that Quiznos use fatty sauces like cheese sauce on sandwiches.

Except for Subway and Quiznos, no other fast food restaurants' meals obtained considerably high mean values. Respondents mentioned that meals served by these fast food restaurants are mostly greasy and fatty, and contain high calories, fried foods, and few healthy choices. Among them, however, Wendy's ($M = 3.23$) and Chick-fil-A ($M = 3.35$) obtained somewhat higher mean values than other fast food restaurants. Respondents described that Wendy's has diverse healthy options, such as fruits, sandwiches, and salads. And, they perceived that Wendy's salads are healthier than those of other fast food restaurants. In addition, respondents stated that Wendy's serves grilled chicken, and they believed that grilled chicken are healthier than fried chicken. About Chick-fil-A, although few respondents said that their meals are also greasy, fatty, and fried, most respondents mentioned that Chick-fil-A offers healthy choices, such as salads and grilled chicken. They also perceived that the tastes of Chick-fil-A's chicken are healthier and fresher than those of other fast food chicken. Like Wendy's, respondents believed that grilled chicken are healthier than fried chicken.

Table 2
Mean Differences between Respondents who have High or Low Health Consciousness in terms of Ratings on Fast food Restaurants' Menu Items

Fast food Restaurants		n	M	SD	Range	
					Low	High
McDonald's	Low*	82	2.50	1.24	1.00	5.00
	High**	85	2.35	1.28	1.00	5.00
Burger King	Low	81	2.52	1.04	1.00	5.00
	High	84	2.20	1.15	1.00	6.00
Wendy's	Low	82	3.32	1.37	1.00	6.00
	High	84	3.14	1.40	1.00	6.00
KFC	Low	80	2.33	1.09	1.00	5.00
	High	85	2.05	1.22	1.00	6.00
Chick-fil-A***	Low	78	3.59	1.32	1.00	6.00
	High	80	3.13	1.50	1.00	6.00
Popeyes***	Low	65	2.60	1.18	1.00	5.00
	High	73	2.14	1.21	1.00	5.00
Subway	Low	82	5.80	.76	4.00	7.00
	High	85	6.00	.82	3.00	7.00
Quiznos	Low	79	4.94	.82	1.00	7.00
	High	82	4.93	1.14	2.00	7.00
Taco Bell	Low	81	2.62	1.15	1.00	6.00
	High	84	2.51	1.39	1.00	6.00
Del Taco	Low	41	2.66	1.33	1.00	5.00
	High	49	2.31	1.19	1.00	5.00
Long John Silver's	Low	63	2.71	1.34	1.00	7.00
	High	67	2.40	1.36	1.00	6.00

Note. *Respondents who have low health consciousness

**Respondents who have high health consciousness

*** $p < .05$

Whether there are differences between respondents who have high or low health consciousness on their ratings on fast food restaurants' menu items (according to how healthy they consider these restaurants' menus) was examined in this study. High health conscious respondents were considered those who had average scores of more

than four points on a scale of 1 to 7 on questions asking the extent to which the respondents consider nutrition, calories, and fat contents when they select menu items in fast food restaurants. There were only two significant findings ($p < .05$) between high or low health conscious respondents. High health conscious respondents regarded Chick-fil-A's (M ; high=3.13 and low= 3.59) and Popeyes' (M ; high=2.14 and low=2.60) menu items as less healthy than did low health conscious respondents. However, in all ratings of fast food restaurants' menu items, respondents with high health consciousness were more critical (although not statistically significant) than those who have low health consciousness with respect to the ratings of the menu items (refer to Table 2). The consistency of these ratings would seem to indicate, at least in this study, that more health conscious college students are more critical of fast food menu items, and may be less likely to consume them. This would seem to contradict the perception that all college students, on at least most, are large and indiscriminate consumers of fast food, and would seem to indicate fast food companies might want to develop more healthy menu items.

Whether there are differences between respondents who have high or low nutrition knowledge with regard to ratings on fast food restaurants' menu items was also investigated. Respondents who have high nutrition knowledge refer to those who obtained more than 70 percent in the nutrition knowledge test. There were significant differences ($p < .05$) between respondents who have high or low nutrition knowledge in terms of ratings on McDonald's (M ; high = 2.14 and low = 2.58), Burger King (M ; high = 2.12 and low = 2.49), Popeyes (M ; high = 1.91 and low = 2.57), Taco Bell (M ; high = 2.22 and low = 2.75), and Del Taco (M ; high = 2.11 and low = 2.69). Respondents who obtained high nutrition knowledge scores regarded these restaurants' menu items as less healthy than did their counterparts. Although there were not significant differences for all fast food restaurants, generally, respondents who had high nutrition knowledge scores were more critical than those who have low nutrition knowledge scores with regard to the ratings of the menu items.

In terms of examining the difference between males and females about rating of fast food restaurants' menu items, there were significant differences ($p < .05$) between male and female respondents with reference to ratings on KFC (M ; male = 2.42 and female = 2.01), Chick-fil-A (M ; male = 3.67 and female = 3.14), and Popeyes (M ; male = 2.65 and female = 2.12). Female respondents considered these meals as less healthy than did male respondents. Again, even though there were not significant differences for all fast food restaurants, generally, females were more critical than males with respect to the ratings of the meals.

Differences of health consciousness and nutrition knowledge between male and female respondents were also examined. In terms of the health consciousness, there were significant differences between males and females about the questions asking the extent to which the respondents consider nutrition (M ; male = 3.86 and female = 4.77, $p < .001$), calories (M ; male = 3.36 and female = 4.32, $p < .05$), and fat contents (M ; male = 3.69 and female = 4.54, $p < .05$), when they select menu items in fast food restaurants. Female respondents were significantly more health conscious than male respondents.

With respect to the nutrition knowledge, there was significant difference ($p < .001$) between males and females. Female respondents were significantly more knowledgeable ($M = 65.36$) than male respondents ($M = 57.07$) about nutrition information.

There were also significant differences ($p < .05$) between respondents who often go to fast food restaurants and those who do not often go to fast food restaurants with reference to the level of health consciousness and ratings on fast food restaurants' menu items. Respondents who often go to fast food restaurants refer to those who go to fast food restaurants more than two times a week. It was found that respondents who do not often go to fast food restaurants were more health conscious ($M = 4.35$) than those who often go to fast food restaurants ($M = 3.58$). And, respondents who do not often go to fast food restaurants were more critical than those who often go to fast food restaurants in terms of ratings on some fast food restaurants' menu items, such as Burger King (M ; not often = 2.17 and often = 2.93), Wendy's (M ; not often = 3.10 and often = 3.63), KFC (M ; not often = 2.02 and often = 2.68), Taco Bell (M ; not often = 2.43 and often = 3.00), and Del Taco (M ; not often = 2.29 and often = 3.24).

Additionally, the most important things respondents consider when they select menu items in fast food restaurants were investigated. In this question, they were allowed to answer all that apply. Among respondents, 55.7% regarded price as the most important thing when they choose menu items. Taste (53.3%), quality (32.3%), healthfulness (29.3%), portion size (16.8%), menu variety (15.6%), and nutrition information (9.0%) followed price.

As far as respondents' most favorite fast food restaurants, respondents picked Wendy's (24.6%), McDonald's (17.4%), Subway (13.2%), Burger King (8.38%), and Taco Bell (7.2%).

Lastly, as expected and as some vindication to our education institutions, there was a significant difference ($p < .05$) between respondents who have taken one or two nutrition courses with regard to nutrition knowledge. Respondents who have taken two nutrition courses obtained higher nutrition knowledge score ($M = 63.19$) than did respondents who have taken one course ($M = 57.38$).

DISCUSSION

Currently, only few studies have been conducted about consumers' health perceptions of fast food restaurants' menu items. This study contributed to the literature of consumers' perceptions about fast food restaurants. This study was also the first trial to apply consumers' health consciousness to examine their health perceptions on fast food menu items. The findings from this study indicate that there is a difference between the results of respondents' most favorite fast food restaurants and their health perceptions on fast food restaurants' menu items. Even though respondents selected Wendy's and McDonald's as their most favorite fast food restaurants, they perceived Subway and Quiznos as restaurants which serve healthier menu items than others. This result is also supported by the findings obtained from the question asking respondents' most important things when they select menu items in fast food restaurants. They chose price, taste, and quality as the most important things when they select menu items in fast food restaurants. This result supports the finding of McNeal et al. (1980). They found that nutrition is not an important factor in the selection of fast food menu items, and people eat fast food meals because of taste, convenience, and price, but not for nutrition.

The finding describes that respondents perceive menu items served by Subway and Quiznos as much healthier meals than those of other fast food restaurants, because Subway and Quiznos have many healthy options, and their meals include low calorie, low fat contents, and healthy ingredients. Other fast food restaurants except for these two are considered offering much less healthy menu items than Subway and Quiznos, because their meals are generally greasy and fatty, and have high calories, fried foods, and few healthy choices. Among them, meals provided by Wendy's and Chick-fil-A are believed somewhat healthier than those of other fast food restaurants, since they offer healthy options, such as salads and grilled chickens. The finding indicates that people perceive that grilled chicken are healthier than fried chicken.

With regard to examining differences between respondents who have high or low health consciousness on their ratings on fast food restaurants' meals, although there was only two statistically significant results, in all ratings of fast food restaurants' menu items, high health conscious respondents were more critical than low health conscious respondents. This finding would seem to show that more health conscious college students are more critical of fast food menu items and may be less likely to consume fast food meals. This prediction may be supported by the result obtained from the examination of differences between respondents who do not often go to or often go to fast food restaurants for the ratings on fast food restaurants' meals. Respondents who do not often go to fast food restaurants were more health conscious than those who often go to fast food restaurants. In addition, respondents who do not often go to fast food restaurants were more critical than those who often go to fast food restaurants for the ratings on fast food restaurants' meals.

The finding also identify that there are significant differences between respondents who have high or low nutrition knowledge in terms of ratings on some fast food restaurants' menu items. Although not all fast food restaurants presented significant differences, generally, respondents who have high nutrition knowledge scores were more critical than those who have low nutrition knowledge scores for the ratings of the fast food restaurants' menu items. This finding supports the study of McNeal et al. (1980). McNeal et al. found that high nutritional knowledge group considers fast food meals as less nutritious. In addition, with reference to the investigation of the difference between respondents who have taken one or two nutrition courses in terms of nutrition knowledge, those who have taken two nutrition courses obtained higher nutrition knowledge score than did those who have taken one course. This finding may provide an implication to schools for the control of the prevalence of obesity in students.

In addition, this study indicates that although there were not significant differences for all fast food restaurants, females were more critical than males with respect to the ratings of fast food restaurants' menu items. In terms of health consciousness and nutrition knowledge, there were significant differences between females and

males. Females were significantly more health conscious and more knowledgeable about nutrition information than males. These findings uphold the studies conducted by Wardle et al. (2004), Buttriss (1997), and Turrell (1997). Wardle et al. (2004) found that gender differences in food selections are derived partly from women's weight control involvement and partly from their strong beliefs in healthy eating. Buttriss (1997) and Turrell (1997) also concluded that females were more knowledgeable than men in terms of issues associated with diet and health.

The findings also provide several management implications to marketers. They indicate that there is a difference between respondents' most favorite fast food restaurants and restaurants which they perceive as healthier than others. Additionally, price, taste, and quality are the most important things when respondents choose menu items in fast food restaurants. With these findings marketers should also consider the trend that interests in the nutrition of the fast food are increasing, and consumers are becoming more health conscious. Thus, marketers should make an effort to develop new menu items which are proportionately weighed with these diverse consumers' need in order to attract consumers in the future.

The finding also identifies that more health conscious college students are more critical of fast food restaurants' menu items, and they may be less likely to go to fast food restaurants. This finding suggests that college students are not a large and indiscriminate consumer group of fast food meals. Thus, marketers need to develop healthier menu items to attract more health conscious college students.

In addition, the finding shows that knowledgeable students about nutrition information are more critical for the ratings of the fast food restaurants' menu items. Students who have taken two nutrition courses obtained higher nutrition knowledge score than did those who have taken one course. This finding provides an implication to schools for the prevalence of obesity in students. According to Ogden, Carroll, Curtin, McDowell, Tabak, and Flegal (2006), 17.1% of US children and adolescents were overweight in 2003 to 2004. Schools should offer nutrition courses to students to teach nutrition information about meals. Through the nutrition knowledge obtained from the nutrition courses, students will critically be able to evaluate fast food restaurants' menu items, and they are more likely to select healthier menu items.

Lastly, this study indicates that females are a different consumer group than males with regard to health perception on fast food meals, health consciousness, and nutrition knowledge. Thus, marketers should provide careful and differential consideration to retain and to attract this group. Food marketers need to develop healthy menu items and marketing campaigns that effectively target female consumer group.

LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDIES

Several limitations are associated with this study. First, this study did not attempt to examine consumers' health perceptions of specific or individual menu items which fast food restaurants offer, but to investigate consumers' general health perceptions of menu items which fast food restaurants serve. Thus, if a respondent often eats a salad menu item in a fast food restaurant and believes that the salad is healthy, the respondent may give high value on the rating of menu items served by the fast food restaurant, even if other menu items are generally perceived as unhealthy by other respondents. Fortunately, this kind of case was not shown in this study. The assumption related to the normal distribution of the dependent variables about that case was not violated. However, the possibility that the case can happen is fairly high. Thus, we recommend future researchers to investigate consumers' health perceptions of specific menu items, such as salads or hamburgers commonly served by each restaurant. By doing so, researchers will be able to compare specific menu items of fast food restaurants, according to how healthy they are. Second, the results may not be generalized to other general fast food consumers. Data from this study were collected from students in a university. Although university students are a huge consumer group of fast food companies, they are also only a part of diverse consumer groups which patronize fast food restaurants. Studies using general fast food consumers may find different results. Thus, future studies should consider employing general fast food consumers. Lastly, the sample selection for this study was not purely random. If pure random sampling were used toward general fast food consumers, external validity would be increased. Thus, future studies should develop a systematic sampling design that effectively represents the population.

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EFFECT OF INFORMATION QUALITY ON USER BEHAVIOR IN A COMPREHENSIVE TRAVEL-SERVICE WEB SITE

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ABSTRACT

A new approach to positioning comprehensive travel-service Web sites (CTWs) is presented in this study, based upon review of a previous study that introduced a new taxonomy of Web site categories in a three dimensional space. It is posited that the customer review service in CTWs enhances users' perception of information quality, and a framework is presented derived from assumptions that information quality affects perceived service quality, user satisfaction, and ultimately users' return intentions to CTWs. Managerial implications and suggestions for future research are also discussed.

Key Words: comprehensive travel-service Web sites, information quality, taxonomy of Web sites category.

INTRODUCTION

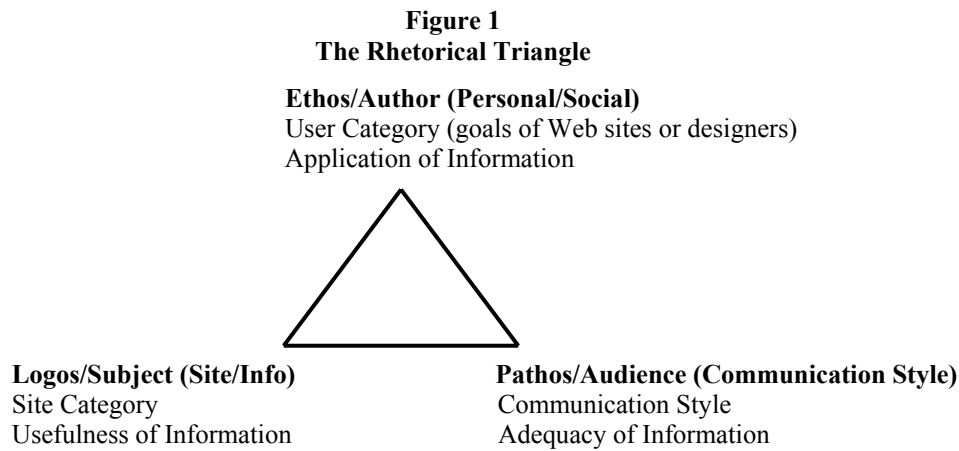
As the proliferation of Internet usage has expedited the use of electronic purchases of travel products and services, more and more travelers search travel information from Web sites today. Most travel-service Web sites enable Internet users to access a wide range of travel related services to plan their trips in the cyber marketplace where they can complete their purchases with one stop shopping. In addition, many travel-service Web sites provide users with peer users' reviews and evaluations of their potential lodging accommodation, which help them make more informed decisions than ever before. Web site users tend to perceive peer users' reviews and evaluations as being more reliable and trustworthy than other information sources because they consider peer users' comments on travel products and services as based on their real experiences (Folkes, 1984). These travel-service Web sites, therefore, emphasize their functionality as a communication channel among users, in which they try to gain users' credibility by providing genuine and candid peer users' evaluations of travel products and services. Among many travel agency Web sites, such travel-service providers as Expedia.com, Hotels.com and TripAdvisor.com, started to offer comprehensive travel related services, which include extensive information on hotel properties and travel destinations, an online purchase activity, and access to previous customers' opinions and evaluations of their travel experiences. In order to distinguish these travel service providers from others, the term "comprehensive travel-service Web site" (hereafter, CTW) has been coined in the present study.

With a fast growing Internet user population, a number of studies (Barnes and Hinton, 2007; Childers, Carr, Peck, and Carson, 2001; Wolfenbarger and Gilly, 2003) have focused on the unique capabilities of the online medium that provides interactivity, personalized experiences, community, content, increased product selection and information. Studies have been rare, however, in a content oriented approach to assessing whether or not customers' review services on travel-service Web sites affect users' perceptions of overall service quality of CTWs. A thorough review of a previous study (i.e., De Marsico and Levialdi, 2004) revealed that researchers attempted to position generic travel agency Web sites in a taxonomy. The taxonomy has been developed newly in the prior study so as to categorize Web sites by characteristics of provided information, Web site goals, and communication style. However, the previous study did not attempt to categorize travel Web sites in light of enhancing information quality that affects users' perception on service quality and their satisfaction. In the context of positioning in a taxonomy, the present study focuses on CTWs that offer customer review services. As more and more Internet users are turning their attention to these CTWs for their travel planning, this study aims to develop a conceptual framework to weigh effects of customer review service on information quality of CTWs, which is believed to affect customers' perceived service quality, their overall satisfaction, and eventually their return intentions to CTWs.

REVIEW OF LITERATURE

Adoption of the rhetorical triangle in information quality

Today, a wide range of Web sites exists in different categories, designed with different purposes, strategies and styles. As De Marsico and Levialdi (2004) proposed, it would be useful to have a taxonomy of Web sites in order to distinguish individual Web sites from others in regards to their characteristics and positions. They categorized Web sites based on site category, Web sites' goals, and communication style in their taxonomy. Although each site may fall in more than one category of the taxonomy, the purposes of Web sites may differ depending on the kind of information provided, the goals of Web sites, and the characteristics of the target audience as Desmet (2000) pointed out. With the aim of illuminating the significance of customer review services that affect information quality and users' perception on service quality of CTWs, a new approach was taken to positioning CTWs in the context of the taxonomy. The Rhetorical Triangle, originally developed by Aristotle, presented three vertices of Logos, Ethos, and Pathos reflected in a three dimensional taxonomy in the study of De Marsico and Levialdi (2004), in which the three vertices corresponded to three axes of communication features such as "Site/Info", "Personal/Social", and "Communication Style." Based on these three different communication features used in the previous study, three elements of information quality were adopted for this study, including *Usefulness of Information*, *Adequacy of Information*, and *Application of Information*. These three elements of information quality are viewed to correspond to three dimensions of communication features in our proposed taxonomy, *Site Category*, *User Category* (targeted by a Web site or designer), and *Communication Style*, respectively, as seen in Figure 1.

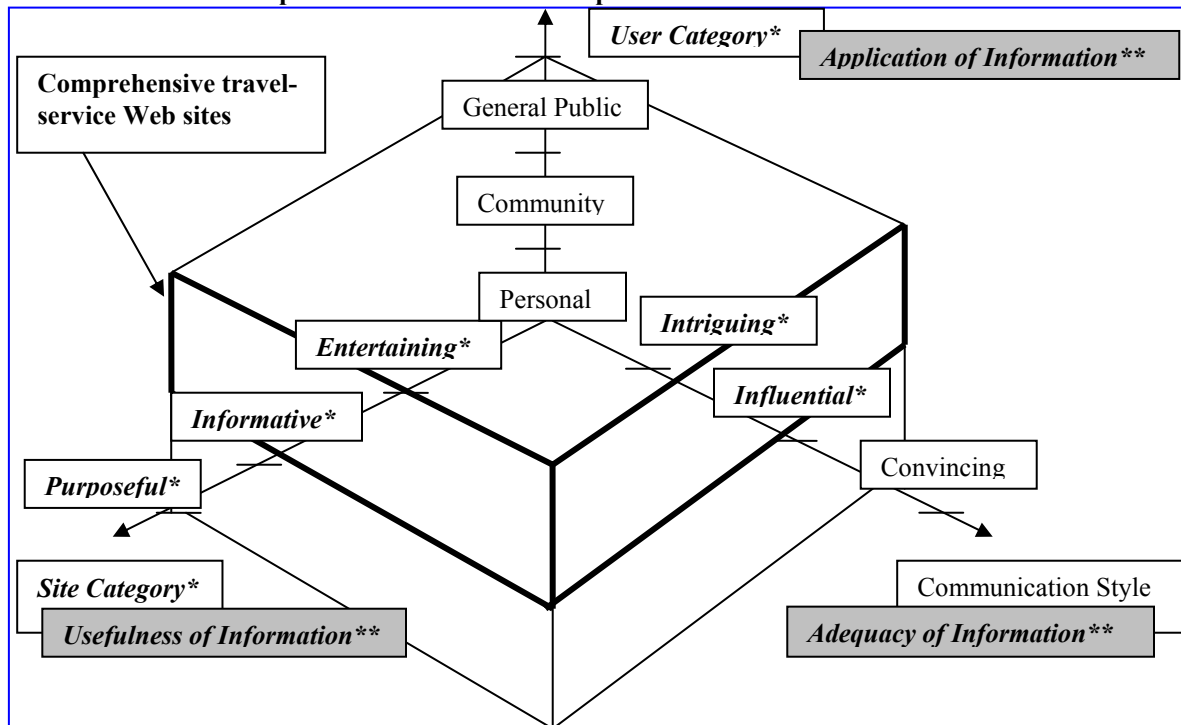


A proposed taxonomy of comprehensive travel-service Web sites

In an attempt to classify the category of Logos vertex corresponding to the proposed taxonomy for the present study, the "Site/Info" from the previous study was renamed as *Site Category* because it is believed that the term of *Site Category* captures the purposes of Web sites in the context of the range of provision of information. Also, three sub-dimensions of the "Site/Info" from the previous study, "Culture specific", "Navigational", and "Commercial," were renamed in the present study as *Entertaining*, *Informative*, and *Purposeful*, respectively, based upon the extent of purpose orientation of Web sites. The *Site Category* dimension is viewed as corresponding to the *Usefulness of Information* in the context of information quality as well. Web sites that are more purpose oriented will be better perceived in terms of usefulness by users. The first sub-dimension of *Site Category*, *Entertaining*, mainly refers to Web sites that aim at those who seek the fun/entertaining aspect by providing light content information and/or services to special interest groups, such as free electronic game sites for amateur gamers and free movie preview sites for movie goers. The *Informative* sub-dimension embraces Web sites where users browse with broad interests to find needed information, such as daily news and discussion boards of other users' blogs. The *Purposeful* sub-dimension corresponds to a goal oriented arena. The majority of commercial Web sites seemingly will fall into the *Purposeful* category. Obviously, CTWs can be positioned between *Informative* and *Purposeful* landmarks on the axes of *Site Category* as well as *Usefulness of Information* in the context of information quality.

The vertex of Ethos corresponding to “Personal/Social” in the previous study (De Marsico and Levialdi, 2004) was renamed as *User Category* in the present study. The “Personal/Social” dimension is concerned with how large a common ground of audience has been aimed at by Web sites. In other words, what category of audience Web sites target among the “Personal”, “Community”, or “Public” categories. The original axis of “Personal/Social” was relabeled as *User Category* to clarify the types of audience or users of Web sites. With respect to the axis of *User Category*, three sub-dimensions of *Personal*, *Community*, and *General Public* are adopted in this study from the original taxonomy. It is assumed that *User Category* is concerned with audience, and we viewed it as corresponding to the *Application of Information* in the context of information quality, which focuses rather on what information will be applicable to different audiences. Therefore, CTWs can be positioned between *Community* and *General Public* landmarks on the axis of *User Category* in a three dimensional taxonomy as well as *Application of Information* in the context of information quality.

Figure 2
Proposed Classification of Comprehensive Travel-Services Web Sites



* indicates renamed labels in this study (*in italic bold*).

** indicates Information quality constructs that match three vertices in the proposed taxonomy.

Finally, the Pathos vertex corresponding to “Communication Style” in the previous study (De Marsico and Levialdi, 2004) was adopted as it was. The three sub-dimensions proposed of the axis of “Communication Style” were “Seductive”, “Informative”, and “Convincing” in the previous study. In an attempt to classify these three sub-dimensions adequately and appropriately in the context of CTWs, we proposed three types of sub-dimensions, namely *Intriguing*, *Influencing*, and *Convincing*. In the *Intriguing* sub-dimension, the Web sites mostly appeal to the target audience’s personal tastes, but intrigue audience with the least influential voice. While *Intriguing* Web sites communicate with a restricted community or special interest groups with little influence, *Influencing* Web sites can be addressed to a wider range of people or appeal to an audience with a more influential tone because it is believed that *Influencing* Web sites strive to provide more influential information than *Intriguing* sites. In contrast, *Convincing* Web sites usually appeal to the rational processes of the audience. If the audience is convinced by information posted on a Web site that provides customer reviews or evaluation, the audience may tend to trust that Web site so that the Web site will gain enormous credibility with the users. Therefore, many CTWs can be categorized under the *Convincing* sub-dimension of *Communication Style* because their communication style is involved with users’ active participation in sharing information. Consequently, CTWs can be positioned between

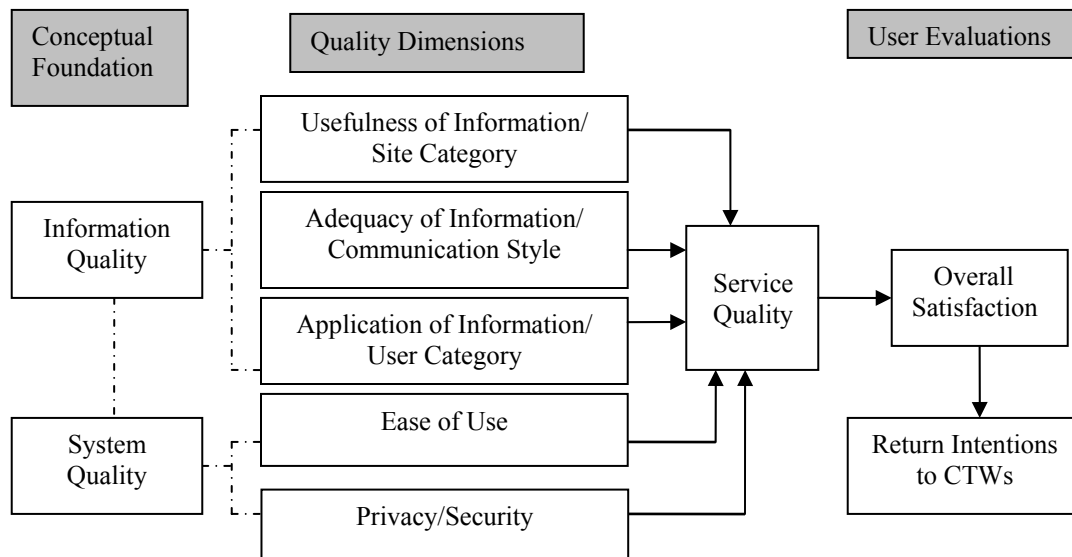
Influential and *Convincing* landmarks on the axis of *Communication Style* dimension. CTWs can be viewed as a very convincing communication tool for information searchers on the Internet due to their customer review service. It also corresponds to the construct of *Adequacy of Information* in the context of information quality. The taxonomy model was adopted from the study of De Marsico and Levaldi (2004) and has been modified to accommodate the position of CTWs in our proposed taxonomy in the present study (see Figure 2).

Adoption of CTWs as a reliable information source by Internet users

CTWs have been prevailing over traditional travel agency sites and help potential customers make more informed decisions than ever before on their purchases of travel products/services by providing customers' review service. As many CTWs are available in the market, prospective customers are easily able to retrieve previous customers' opinions about major travel destinations and travel products around the world that are posted on the review sites (Chipkin, 2005/2006). The candid textual comments help create an enormous credibility of CTWs from users' perspectives, which elevate the perception of information quality of CTWs compared to traditional travel agency sites. A user must have reasons to adopt the Internet as an information source based upon the perceived usefulness and/or the ease of use, according to the Technology Acceptance Model (Davis, 1989). Hence, in order to encourage potential customers' acceptance of CTWs as their information source, CTWs need to provide users with functions of perceived usefulness or ease of use on Web sites.

Newly proposed taxonomy would be incorporated with Technology Acceptance Model (TAM) for a comprehensive study framework. TAM suggests that users' decisions to adopt an IT are primarily determined by their attitudes toward: (1) perceived "usefulness" and (2) perceived "ease of use." The perceived usefulness of the technology refers to the degree to which using the system or technology will improve the user's performance in using technology, while perceived ease of use refers to the process leading to the final outcome from using technology (Childers, Carr, Peck, and Carson, 2001; Davis, 1989; Sanchez-Franco and Roldan, 2005). In this study, it is posited that the notion of perceived "usefulness" refers to information quality in a sense that customers' perceived usefulness of CTWs is determined by how they use context and information presented on the CTWs, whereas the construct of perceived "ease of use" relates to system quality of CTWs based on how well CTWs are designed and their freedom from hassles. By integrating a proposed taxonomy with TAM, this study develops a conceptual framework to examine dynamics of the information quality and the system quality that affect users' perceived service quality, satisfaction, and return intentions to CTWs (see Figure 3).

Figure 3
A Proposed Conceptual Framework and Quality Dimensions of Information in CTWs.



A proposed conceptual framework consists of five exogenous variables and three endogenous variables. In order to assess users' perceived "usefulness" that theoretically corresponds to information quality in this study, three constructs are established, which are *Usefulness of Information*, *Adequacy of Information*, and *Application of Information*. Again, the *Usefulness of Information* construct corresponds to *Site Category* dimension because it is a matter of the purposeful usefulness or categories of Web sites in this dimension. The *Application of Information* construct corresponds to *User Category* because this dimension is related with the range of audiences, which equates to the users. And the *Adequacy of Information* construct refers to *Communication Style* because the main issues of this dimension are relate to the level of influence of Web sites on users in a form of communication between former customers and prospective customers. Two constructs are established to assess users' perceived "ease of use" that theoretically corresponds to system quality with *Ease of Use* and *Privacy/Security*. The *Ease of Use* construct refers to functions that make the use of CTWs easy, such as navigational functions, site organization, and search function. The *Privacy/Security* refers to issues in conjunction with customers' private information, such as credit card information and emails, as well as security when purchasing online.

Information Quality

Several studies on information quality (Delone and McLen, 1992; Doll and Torkzadeh, 1988; and Yang et al, 2005) highlighted the importance of relevance of the content, timeliness, and accuracy of information. Building on the constructs from the previous studies, this study focuses on the information quality aspect because information quality is believed to be strongly affected by the *Adequacy of Information* that corresponds to *Communication Style* dimension in the present study. In other words, a primary purpose of this study lies in assessing the importance of customer review service that is a unique service offering by CTWs, which strongly relates with the information quality component in the dimension of *Communication Style*. Also, this study aims at determining relationships between information quality as a whole and users' perceived service quality, satisfaction, and ultimately their return intentions to CTWs. The constructs of *Usefulness of information*, *Adequacy of information*, and *Application of information* are used to conceptualize the information quality. The taxonomy suggested by De Marsico and Levialdi (2004) was woven into the conceptual framework of the information quality dimension.

a. Usefulness of Information/Site Category

Usefulness of information refers to the value, reliability, currency, and accuracy of information. Specifically, information value is related to relevancy and clarity of the content. Information reliability refers to its accuracy, dependability and consistency of the content (Yang, Cai, Zhou, and Zhou, 2005). In this study, *Usefulness of Information* is extended to capture key components of the *Site Category*, which represents *Entertaining*, *Informative*, and *Purposeful*. The construct of *Usefulness of Information* mainly refers to the content of information on CTWs and is assessed on the basis of questions of perceived usefulness of information including: relevancy, depth, accuracy, and up-to-date information; provision of valuable tips on products/services and customized information; availability of a wide choice of travel products depending on budget, traveling distance, time constraints, and a wide range of holiday packages; accessibility to cultural relevant information on the destinations such as historic sites, sports facilities, clubs, theaters, cinemas, museums, monuments, suggested tours, and so on. The more purposeful the Web site content, the more useful users will perceive it to be. Hence, it is proposed:

[Proposition 1: *Usefulness of Information* will affect users' perception of service quality on a comprehensive travel-service Web site.]

b. Adequacy of Information/Communication Style

Based on the study of Yang et al (2005), adequacy of information refers to the completeness of information. Users expect to retrieve information from Web sites to facilitate their understanding of the products and to help them in procedures of decision making (e.g. detailed product description, transparent price information). In addition, users expect to obtain supplemental services from Web sites, such as company information, professional advice, research reports, contact information, and archives, beyond the core offerings of Web sites. Specifically, comprehensive travel-service Web sites provide Internet users with previous customers' voluntary reviews and ratings and thus, ideally, CTWs need to be positioned differently from traditional travel agency sites, in regards to information adequacy and communication style. In this study, it is believed that the dimension of the *Communication Style* embraces the notion of *Adequacy of Information* because the completeness of information certainly relates to how users perceive information to be convincing, influential, or intriguing. Exemplary measurement items of *Adequacy of Information* will include: product/service descriptions helping users make their purchase decisions; other customers' reviews and opinions on their travel and hotel experiences; accessibility of the individuals who posted

comments on the review sites for additional questions or detailed advice; availability of reliable professional opinions from a real agency or a person for detailed information and interactive feedbacks between customers and the company with quick responses. The unique service provided by CTWs such as customer reviews and evaluations of the lodging properties facilitates users' understanding of the lodging offerings and assists users in making informed decisions on selecting their travel partners. Hence, the *Communication Style* on CTWs is involved in three types of interactions; between users and the Web sites' administrators, between users and the Web sites where users obtain information, and between users and peer users. Due to its usefulness of customer review and evaluation functions, prospective customers respect the CTW as a reliable source of information (Yang et al, 2005). Therefore, it is proposed:

[Proposition 2: *Adequacy of Information* will affect users' perception of service quality on a comprehensive travel-service Web site.]

c. Application of Information/User Category

As De Marsico and Levialdi (2004) proposed, the "Personal/Social" dimension corresponds to how large the common ground is that the designer wants to establish with the users, ranging from personal to general, and how they will present information specifically to different audiences. In order to measure the construct of *Application of Information*, questions can be posed whether or not: information about destinations is presented for the general public and not limited to certain special interest groups or communities; the offers are suitable to many categories of customers, particularly different budget categories; information includes policies about impaired people, children and pets with transportations and accommodations; free access to posted information for the general public. In this study, the "Personal/Social" dimension is extended to *User Category* that corresponds to the *Application of information* in information quality construct. And, it is proposed:

[Proposition 3: *Application of information* will affect users' perception of service quality on a comprehensive travel-service Web site.]

System Quality

System quality refers to customers' perception of a Web site's performance in information retrieval and delivery. In the context of the Web sites, researchers have identified factors of system quality such as usability, accessibility, hyper links (navigation), and security/privacy (Yang et al, 2005). In this study, two major factors are utilized to measure the system quality construct: Ease of Use and Privacy/Security. Many CTWs provide users with not only the adequate amount of travel service information but online transactions that are secured by encrypted access.

a. Ease of Use

Perceived ease of use was once defined as the extent to which one believes that using a particular system would be free of effort (Davis, 1989). Also, numerous studies (Delone and McLen, 1992; Doll and Torkzadeh, 1988; Sanchez-Franco and Roldan, 2005; Shang, Chen, and She, 2004; and Yang et al, 2005) have identified various factors of ease of use, such as Web site structure, user interface, Web site appearance and visual design, intuitiveness, readability/comprehension/clarity, and ease of navigation. One crucial factor is technical adequacy, which relates Web site technical features, such as capacities of systems, networking, hardware, software, system integrity, and accessibility. Accessibility is the core feature of convenience benefits, which makes Web sites an information center. Customers expect the Web-based services to be available at all times and they also want speedy log-on, access, search, and web page download (Yang et al, 2005). In order to assess the construct of *Ease of Use*, we can ask questions whether or not: there is efficiency of navigation on CTWs such as well organized hyperlinks and easily reachable links from the homepage; customized search functions such as clear and well-organized Web structures; a registration required only for bookings for transportation or accommodations; easy information search facilities; fully supported data insertion by pull-down menus with examples and help provided; continuous tracking operations of past search activities (i.e. one need change only a single field when returning to the site for booking); availability of tracking searches in subsequent sections (i.e. flight after hotel) by parameters already set (i.e. calendars to choose the traveling dates); possibility of refining and filter searches (using text areas with optional additional preferences) in order to narrow the amount of data returned to those of real interest; availability of comparisons among many travel solutions; possibility of a specified ordering rule for search results by price, star rating, flight routes; provision of multiple languages, and costs expressed in more than one currency. The

technological aspects such as usability, accessibility, and navigation will be categorized under the Ease of Use dimension. Therefore, we propose:

[Proposition 4: *Ease of Use* will affect users' perception of service quality on a comprehensive travel-service Web site.]

b. Privacy/Security

Web sites often collect and store a variety of sensitive, personal information from their users in order to understand and serve them better. Accordingly, privacy and security features have become sensitive and serious concerns. Frequently used measures for the certainty of secure sites include vendor guarantees of personal information protection (i.e. Verisign), confidence resulting from promises on the site, and the reputation of the organization (Yang et al, 2005). The instrument will assess the construct of *Privacy/Security* using questions whether or not: users want to post their comments in CTWs by using online nicknames to protect their privacy; access to users who posted their comments in CTWs by nicknames is available; payment methods and final cost are clear; final payment includes taxes and fees; different payment methods are supported; personal information such as address, name of travelers are stored in the Web site's database and pop up upon booking; credit card information is never stored in the site's database unless customers want; customers' problems in regards to payment are assured to be solved. The privacy and security issues are important factors that affect customers' satisfaction with the system quality as indicated by many previous studies (Yang et al, 2005; Frederick and Scheffer, 2000; Liao, Palvia, and Lin, 2006; Liljander, Gillberg, Gummerus, and Van Riel, 2006). These studies revealed that the privacy and security issues are one of the most crucial attributes of the Internet that has to be improved immediately in order to position itself as a reliable purchase channel. As a consequence, the attributes of users' privacy in personal information and issues of secure transactions will be categorized under *Privacy/Security* dimension. Hence, it is proposed:

[Proposition 5: *Privacy/Security* will affect users' perception of service quality on a comprehensive travel-service Web site.]

Perceived Service Quality

Yang et al (2005) indicated that overall perceived service quality significantly affected users' satisfaction on Web portal sites. In order to assess overall service quality of CTWs, the instrument will include questions whether or not: services provided by CTWs have overall excellent quality; the service quality provided by CTWs matches users' expectations; the CTWs' service offerings are very competitive. It is assumed in this study that the information quality and system quality affect users' perceived service quality that leads to users' satisfaction, then ultimately to their return intentions or recommendations to others on CTWs. Consequently, we propose:

[Proposition 6: *Perceived Service Quality* will affect users' perception of *Overall User Satisfaction* on a comprehensive travel-service Web site.]

Overall User Satisfaction and Users' Return Intentions

In order to assess overall satisfaction with CTWs, questions will be asked about the level of user satisfaction and the fulfillment of users' needs, which make them stay with the visited CTWs instead of leaving for other Web sites to search for similar information. It will be also asked to measure users' return intentions by posing questions about users' intentions to visit CTWs again for bookings of their next trips, and intentions to recommend CTWs to their family, friends or acquaintances. Thus, it is proposed:

[Proposition 7: *Overall User Satisfaction* with a comprehensive travel-service Web site will affect users' return intentions to visit a comprehensive travel-service Web site.]

IMPLICATIONS

The distinctive service that CTWs provide to prospective customers is the customer review and evaluation of travel products. Customer review service enhances the completeness of information on Web sites, which fulfills the adequacy of information. The adequacy of information and the communication style that CTWs provide are believed to strongly affect customer perception of the information quality. Both information quality and system quality will contribute to attaining customer satisfaction and, in turn, customer return intention to CTWs. This may be the reason that customers turn to CTWs from the traditional travel Web sites. Given the acknowledgment of

customer preferences on quality, breadth, and depth of information, the management of CTWs will be able to maintain the Web site quality with more customer oriented perspectives than merely a universal travel information provider. Thus, industry Web site managers should be aware of the importance of provision of reliable sources of information as well as convenient use of their Web sites. Becoming more connected to online customers via their Web sites, CTWs' management will have opportunities to identify what their customers want and gaps that should be filled to accommodate their continuous changing needs. The practices of Web site improvement based upon a TAM conceptual framework will provide CTWs management with chances to review a potential scope for improvement in the perceived service quality of their Web sites from users' perspectives. Provision of the information quality based upon trustworthy customer reviews will eventually enable CTWs to serve their users with a higher level of user satisfaction. This will lead customers to return to CTWs and recommend others to utilize CTWs for their purchases, which ultimately contributes to the increase of revenue of CTWs. By offering comprehensive travel-related services to their users, CTWs became a one-stop online travel community for travel planning and sharing travel experiences with other interested groups of users. In order to maintain the unique and comparable services of CTWs, management needs to ensure CTWs' functionality of usefulness and ease of use to their current and prospective users.

CONCLUSIONS

Based on thorough reviews of previous research in the field of travel service Web sites, this study has developed a conceptual framework to measure dynamics of Web site quality from prospective customers' perspectives. Further, this study has attempted to propose a suitable positioning of CTWs in the taxonomy of three dimensional space in Web site categories which corresponds to *Site Category*, *User Category*, and *Communication Style*, based on the taxonomy of generic travel agency sites proposed in the prior study. The previous study, however, does not attempt to narrow down the category of travel agency sites into Web sites that provide comprehensive travel services. Hence, it omits the perspective of enhanced information quality derived from customer review service offered on CTWs. This kind of service aspect will significantly affect Internet users in their perception of the information quality of CTWs, embracing users' perceived usefulness of information technology in conjunction with perceived ease of use. Based on the assumptions that users' overall perceived quality of CTWs results from information quality and system quality, it is posited that information quality can be captured by three constructs including dimensions of the usefulness of information, the adequacy of information, and the application of information, and system quality can be assessed by two constructs including dimensions of ease of use and privacy/security. Therefore, it is assumed that perceived service quality of CTWs positively relates to users' overall satisfaction and their return intentions to CTWs, which will ultimately lead to increase revenues and profits of CTWs. As a consequence, seven propositions have been developed in the context of the conceptual framework for this study. In an extensive empirical research for the future, it is expected to see the resultant findings of the dynamics among perceived quality of CTWs, overall user satisfaction, and return intentions to CTWs, which is rooted in the customers' review service that directly influences information quality of CTWs. This study focuses mainly on developing a conceptual framework to configure the dynamics of CTWs among users in light of their perceptions of service quality, satisfaction, and return intentions, which is derived from information quality and system quality of CTWs, as a preliminary step towards an empirical study. With the study's framework, an empirical study will follow shortly and validate this study's propositions.

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MANAGEMENT STYLE, ORGANIZATION STRUCTURE, AND ENVIRONMENTAL HOSTILITY AS DETERMINANTS OF PERFORMANCE: EVIDENCE FROM THE ASIA-PACIFIC HOTEL INDUSTRY

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ABSTRACT

Most hospitality strategy related research has been conducted in relation to the North American domain. Consequently, researchers have questioned whether the knowledge gained can be applied without discretion and caution in developing economies. This research examines the relative roles played by management style, organization structure, and environmental turbulence on performance. Primary data were collected using a mail survey questionnaire and hypotheses were tested. The variables considered were independently related to overall performance. The regression results suggest that each of these variables has an independent, though modest, effect on performance.

Key Words: management style, organization structure, environmental hostility

INTRODUCTION

According to the World Tourism Organization (2007), the hospitality and tourism industry accounts for over \$463 billion in economic activity, roughly 11 percent of the planet's gross domestic product. The World Travel and Tourism Council estimates that approximately 200 million jobs, either directly or indirectly, have been provided by this industry, the equivalent of 12% of world employment, or one in every 8 jobs. Despite its size in aggregate, it is still an industry that experiences an abnormally high rate of failure with many entrepreneurial businesses failing within the first year of operation, often due to lack of strategic management that could otherwise result in investments that sustain firm life and contribute to economic development.

One of the main objectives of every firm is to achieve and sustain a competitive advantage where a significant amount of organizational resources are spent trying to stay ahead of rivals. However, most if not all hospitality strategy related research has been conducted in relation to the North American domain (Schaffer and Litschert, 1990; Chathoth, 2002; Harrington, 2005). The contemporary theory is therefore based in a context of relatively stable environments, a pre-information age society, national capital market systems not yet fully integrated on a global basis, and an unsettled world order. One wonders whether the contemporary body of knowledge in strategic management that originated from research in the free market economies of the developed world find transferability to the emerging economies of the world. Due to its genesis in the context of the developed world as characterized above, we wonder whether the knowledge gained can be applied without discretion and caution in developing economies (Olsen, Sharma, Echeveste and Tse, 2005).

Our study looks at hotels within the Asia Pacific region – an area that is growing rapidly in terms of inbound and outbound tourism and is thus very attractive to many leading U.S. and European hotel groups that are keen to increase their presence in the region. The Asia Pacific region is fast becoming a major source market for the international hotel industry. Both regionally and globally, significantly larger portions of travel will be generated and demand created within the Asian markets. The World Tourism Organization (2007) reports that growth in the number of tourist arrivals to the region is forecasted to outpace the world average of 4.1 per cent through the year 2020. According to the same source, the Asia Pacific is projected to account for over 25% of all inbound tourism by the year 2020. The markets provide immense opportunities for hotel expansion. Key U.S. and European based hotel companies have been taking full advantage by developing full-service properties throughout Asia (e.g. Coleman, 2002).

Over the past few decades, there has been increasing academic and practitioner interest in the issue of a fit between a firm and its environment, strategy, structure, and processes (Lawrence and Lorsch, 1967; Drazin and Van de Ven, 1985; Miller, 1991). Yet, Kotha and Nair (1995) note that there is a paucity of research that systematically investigates the impact of controlled (or internal contextual variables) and non-controlled (or external contextual) variables on firm performance using multivariate statistical methods, especially within the non-U.S. context (Jogarathnam and Tse, 2004, 2005, and 2006). The purpose of this research, therefore, is to examine the relative roles played by selected internal variables (i.e. management style and organization structure), and environmental turbulence (an external contextual variable) on performance.

RELATED LITERATURE

Environmental hostility

The conceptualization and measurement of an organization's environment is important in order to understand organizational phenomena. Researchers focusing on hospitality strategy have looked at a variety of environmental concepts such as environmental scanning (e.g. Costa and Teare, 1994; West and Anthony, 1990), uncertainty (Dev and Olsen, 1989), dynamism (Olsen and DeNoble, 1982), and munificence (Jogarathnam, Tse and Olsen, 1999). This research adopts the resource dependence perspective and posits that firms are subjected to greater degrees of uncertainty as the environment becomes more hostile. Covin and Slevin (1989) argue that environmental hostility poses a significant threat to small firm viability and success. According to the authors "precarious industry settings, intense competition, harsh, overwhelming business climates, and a relative lack of exploitable opportunities" (p.75) are characteristics that typify hostile environments. Non-hostile or benign environments, in contrast, provide a generally safe context for businesses due to their abundant investment and market opportunities as well as their largely munificent settings.

Most researchers today subscribe to the notion that environments in general pose constraints and opportunities for organizations. However, recent empirical studies have brought into question the moderating role of the environment on the relationship between strategy and performance (Pelham & Wilson, 1996; Jauch, Osborn & Glueck, 1980; Prescott, 1986; Jogarathnam, Tse & Olsen, 1999; Pelham, 1999; Becherer & Maurer, 1997). These studies have found few, if any, significant interactions between strategy and environmental variables. Moreover, in the few cases where significant moderating effects were found, the interactions did not add significantly to the R-square levels in predicting performance. However, Covin and Slevin (1989) did find that the interaction between environmental hostility and strategic posture was significant and explained 5% of the variance in performance; the limited variance was attributed to the possibility of greater influence by variables such as organization culture and industry structure.

Managerial style

An entrepreneurial management style can be viewed as a characteristic of organizations and can be measured by looking at managerial behavior as the firm engages in the entrepreneurial process (Miller, 1983; Karagozoglu and Brown, 1988). The process of exploiting opportunities and developing innovations is one aspect of the concept of entrepreneurship (Guo, 2007). Entrepreneurship includes acts of creation, renewal, or innovation that occur within or outside an organization. Entrepreneurship is especially important for firms facing rapid changes in industry and market structures, customers' needs, technology, and societal values. Entrepreneurial firms are those in which the top managers have entrepreneurial management styles, as evidenced by the firm's strategic decisions and operating management philosophies (Covin, 1991; Naman and Slevin, 1993).

It has been found that an entrepreneurial orientation is a major factor that determines innovativeness and helps firms succeed in the global marketplace. Entrepreneurship is a multidimensional process involving the environment, the organization and individuals (Guo, 2007) and is reflected in the managerial style of top management who is inclined to take business-related risks, to favor change and innovation in order to obtain a competitive advantage in the market place. Managerial style can be viewed as a firm's placement along a continuum ranging from conservative to entrepreneurial (Karagozoglu and Brown, 1988). Firms with conservative strategic postures are risk adverse, non-innovative, and reactive.

Organization structure

There are two important administrative mechanisms in strategic management: one is managerial skills and knowledge need to implement and to follow the competitive strategy chosen by the firm; and the other is the design

of the organization structure, that is, how job tasks are divided, grouped, and coordinated. Managerial skills and knowledge is the ability of the firm to perceive environmental changes as opportunities and to be able to take advantage of them (Barth, 2003).

Organization structure can take many forms ranging from highly mechanistic to highly organic. Mechanistic structures are typically highly formalized, non participative, hierarchical, tightly controlled, and inflexible. On the other hand, an organic structure is characterized by informality, decentralization of authority, open channels of communication, and flexibility (Khandwalla, 1977). It is believed that a volatile environment drives the structures of organizations toward greater organicity (Mintzberg, 1979; Miles, Covin and Heeley, 2000). In stable environments, it is easier for firms to predict raw materials supplies, customer demand, and the amount of time required for particular operations. Under this type of environment, mechanistic structures that stress standardization and formalized control are common and often associated with superior performance (Burns and Stalker, 1961; Lawrence and Lorsch, 1967). On the other hand, in environments that are dynamic and thus unpredictable, firms must have the ability to rapidly respond to changing conditions. Accordingly, organic structures have been found to be more prevalent and effective in dynamic environments (Miller and Friesen, 1984; Miles, Covin, and Heeley, 2000).

Based on the literature reviewed, the following research hypotheses were examined:

H1: Management style, organization structure and environmental turbulence will be independently associated with firm performance.

H2: The predictive ability of management style, organization structure and environmental turbulence will vary with respect to firm performance.

METHOD

Primary data were collected by means of a mail survey questionnaire completed by general managers (or their designees) of hotels located in Mainland China, Hong Kong, Malaysia and Singapore. Although the limitations of questionnaire-based research are well documented (cf. Yu and Cooper, 1983) the benefits arising from cost savings, convenience, anonymity, and reduced interviewer bias seem to outweigh the limitations. The sampling frame represents a listing of all star-grade hotels maintained by each of the following agencies: China International Travel Services, Hong Kong Hotels Association, and the travel associations of Malaysia and Singapore, respectively. The survey questionnaire was addressed to the general manager and included a cover letter that explained the purpose of the research as well as a pre-addressed envelope. Two subsequent mailings with a reminder letter were sent out to those general managers whose responses were not received within three and six weeks, respectively, of the initial mailing.

Performance was designated as the dependent variable in this study while management style, organization structure, and environmental turbulence were considered the independent variables. Existing scales were adopted to measure all three constructs. Reliability was tested using the conventional measure of coefficient alpha. Scales were constructed for each variable by averaging the ratings for the items associated with each measure. Adopting this method, indices were developed for each firm to represent the variables of performance, structure, and strategic posture. Correlations and regression analysis were adopted to test the hypotheses and significance was tested at the $p < 0.05$ level.

Measures

Management style

Following Naman and Slevin (1993), entrepreneurship was measured using a nine-item, 7-point Likert type scale. Covin and Slevin (1988) developed this scale based on early work by Miller and Friesen (1982) and Khandwalla (1976/77). These researchers operationally define strategic posture as an aggregate measure of three dimensions. These comprise the willingness to take business related risks, the willingness to be proactive when competing with other firms, and the willingness to favor change and innovation in order to obtain competitive advantage (Miller, 1983; Covin and Slevin, 1988; Naman and Slevin, 1993). Managerial assessments were obtained by means of a structured questionnaire. In responding to the items, respondents were asked to characterize the collective management style of key decision-makers. The ratings assigned to these items were averaged to obtain an entrepreneurial style index for each firm.

Organization Structure

Organization structure was operationally measured as the extent to which organizations are structured in organic or mechanistic forms. A seven item, 7-point Likert type organization structure scale was adopted. This scale was initially developed by Khandwalla (1976/77) to measure organicity – the organic versus mechanistic orientation of a business, and subsequently validated by researchers including Naman and Slevin (1993) and Covin and Slevin (1988). Respondents were asked to characterize the extent to which the operating management philosophy of their firms favored aspects of structure. The ratings assigned to the items were averaged to obtain an organicity index for each firm; the higher the index, the more organic the firm's organization structure.

Environmental Turbulence

This study operationalized environmental turbulence using an eight-item, seven-point instrument adopted by previous researchers (e.g. Naman and Slevin, 1993). Khandwalla's (1976/77) three-item scale of environmental hostility and Miller and Friesen's (1982) five-item environmental dynamism scale were the components of this measure. Managerial perceptions of environmental turbulence were obtained by means of a structured questionnaire using a seven-point Likert-type scale ranging from 'strongly agree' to 'strongly disagree'. The ratings on the eight items were averaged to obtain a single environmental turbulence index for each firm – the higher the value, the more turbulent the environment.

Performance

Performance was measured using multiple criteria reflecting both objective and subjective perspectives. Respondents provided objective information on Annual Sales Growth and Annual Return on Sales. In addition, managerial perceptions of overall performance were measured with a modified version of an instrument developed by Gupta and Govindarajan (1984). For this overall measure, respondents first rank ordered the importance of the following performance criteria: Cash Flow, Sales Level (\$\$), Return on Sales, Net Profit, Market Share, and Sales Growth. The respondents then indicated on a five-point interval scale, ranging from 'highly dissatisfied' to 'highly satisfied', the extent to which they were satisfied with their hotel's performance on these performance criteria. The 'satisfaction' scores were multiplied by the 'importance' rankings in order to compute a "weighted average performance index" for each firm. Previous studies have established that managerial interpretations correspond closely to internally-obtained objective performance indicators (Dess and Robinson, 1984; Covin, 1991; Jogaratnam, 2002) and externally obtained secondary data (Venkatraman & Ramanujam, 1987).

RESULTS

Surveys were mailed to the 581 hotel general managers listed in the publications comprising the sample frame and 187 responses were obtained for an overall response rate of 32.18%. There were no statistically significant ($p < 0.05$) differences found in the data obtained from the four countries on any of the variables measured. Likewise, no differences were found between early and late respondents. Follow up telephone calls were made to several non-respondents and based on information provided by ten of these non-respondents, no statistically significant differences were found between respondents and non-respondents on the hotel characteristics and personal profile of managers. These tests, along with the range of the data obtained, suggest that the data are not subject to response bias. The majority of responses (68%) were obtained from regionally or internationally branded properties managed, more often than not, from managers with considerable international exposure. Approximately 87% of the hotels were self-typed as 4 or 5 star grade hotels. Additional characteristics not included due to space restrictions.

Table 1
Descriptive Statistics with inter-item reliability coefficients on the diagonal

	Mean	SD	1	2	3	4
1. Management style	4.72	1.00	0.874			
2. Environmental turbulence	4.09	0.79	0.416**	0.703		
3. Organization Structure	4.10	1.17	0.347**	0.497**	0.851	
4. Performance Index	11.89	2.91	0.259**	-0.168*	-0.169*	0.900

** . Correlation is significant at the 0.01 level (2-tailed)

* . Correlation is significant at the 0.05 level (2-tailed)

Are management style, organization structure, and environment independently associated with performance?

The correlations presented in Table 1 reveal that management style, organization structure, and environmental hostility were independently related to overall performance. The strength of the relationship, though modest, was statistically significant at above the $p < 0.05$ level. As expected the direction of the relationship was positive with respect to the correlation between management style and performance. However, the correlations between organization structure and performance, and environmental hostility and performance were negative. In other words, while an entrepreneurial management style was positively associated with performance, an organic structure and a turbulent environment were negatively associated with performance.

The regression results (Table 2) suggest that each of the variables considered, (i.e. management style, organization structure and environmental turbulence) has an independent, though modest, effect on performance (models 1, 2, and 3). However, these variables combine to explain over 21 percent of the variance in performance (model 4), suggesting that the effect of the controlled and non-controlled variables on performance is additive. As suggested previously, while the effect of management style on performance is positive, the effect of organization structure and environmental turbulence on performance is negative.

Table 2
Regression results (dependent variable: Performance Index)

Variable	Model 1 B ^a	Model 2 B ^a	Model 3 B ^a	Model 4 B ^a	Beta ^b
Intercept	7.52 (1.75)	15.90 (1.32)	10.33 (1.81)	13.36 (2.05)	
Management Style	1.22 (0.36)			2.10*** (0.37)	0.443***
Organization Structure		-0.675 (0.311)		-1.08** (0.34)	-0.263**
Environmental Turbulence			-1.015 (0.475)	-1.39** (0.59)	-0.235**
R ²	0.067	0.029	0.028	0.229	
Adjusted R ²	0.061	0.023	0.022	0.213	
F statistic	11.31***	4.717*	4.558*	14.75***	

a. Unstandardized regression coefficients, with standard errors in parentheses

b. Standardized regression coefficients (for model 3)

***p < 0.001

**p < 0.01

*p < 0.05

CONCLUSION/MANAGERIAL IMPLICATIONS

Management style was found to have the greatest impact on performance. The implication here is that firms should consider emphasizing their current competitive advantages while using entrepreneurial actions to innovate and manage change in an attempt to develop tomorrow's competitive advantage. Among the factors that affect companies' success in implementing a corporate entrepreneurship strategy, is top management ability to establish a vision. In addition an entrepreneurial culture is needed to stimulate process, product, and market innovation and implement a corporate entrepreneurship strategy. In such a culture, creativity, commitment, dedication, and a desire to innovate are common behavioral norms. Moreover, managerial time and resources need to be allocated to the

development and communication of entrepreneurial behavior at all levels of the organization. The more risk taking and proactive a firm's posture, the more likely it is to choose a flexible organizational structure to allow it to pursue hot, new innovative ideas more quickly and easily.

As environments become more demanding in the future, it appears that fit will matter even more. Successful firms will need to engage in a continuous process of organizational learning and adaptation. The 1990's were a time during which companies were redefining their businesses, thinking about how to most effectively use human resources, and learning how to compete in the global economy. The information revolution has created a business environment with shorter product cycles, increased segment fragmentation, blurring industry boundaries, inverted corporate hierarchies, and increased interdependence of world markets. Such increased environmental dynamism increases the need for innovativeness – the ability of a firm to introduce new products and production processes in order to capitalize on marketplace opportunities. In other words, as organizations attempt to survive and grow under these conditions, they seek creative ways to manage change and innovation. Some of the world's best-known companies such as Apple and Compaq, had to endure painful transformation in an attempt to become more entrepreneurial. As the 21st century unfolds, entrepreneurial actions are viewed as critical pathways to competitive advantage for companies of any size, and can be expected to enhance firm performance (Ozsomer, Calantone, and Di Bonetto, 1997). It has been suggested that small firms (under 500 employees) with well-defined strategic postures can gain from the collaborative relationship of sharing of resources with competitors, suppliers, trade associations, and the community (Golden and Dollinger, 1993). Findings from a survey of the small hotel sector in Scotland provide some evidence to support the thesis that small hotel entrepreneurs have to adopt a business-oriented approach to ensure their survival and success (Glancey and Pettigrew, 1997). One company in the healthcare management field, Acordia Inc. developed and prospered through its strategic entrepreneurial vision (Kuratko, Ireland, and Hornsby, 2001). Novelty, in terms of new resources, customers, markets, or a new combination of resources, customers, and markets, is the defining characteristic of entrepreneurial actions.

LIMITATIONS AND FUTURE RESEARCH

The fact that the regression models did not explain large portions of the variance in performance suggests that variables other than those considered here might be important predictors. A complex causal model including variables such as life-cycle stage and organizational and national culture among others will most likely increase predictive power. Further, the cross-sectional approach adopted in this research does not capture the effects of alignment over time, but rather provides a snapshot of the relationship at one point in time. The external validity of the results is also limited due to the geographically focused nature of the sample. However, the study does reveal interesting relationships and provides a better understanding of how the strategy-structure-performance link applies to hotels, at least within the Asia Pacific context. Regarding future research, in order to examine the variables in more depth, longitudinal study is needed.

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TRENDS IN THE FLIGHT CATERING INDUSTRY

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ABSTRACT

Like many industries, the flight catering industry is vulnerable to external forces, making monitoring and pro-active action essential to business success. This paper provides an overview of practitioners' opinions on seven external issues and 15 industry trends affecting the industry, drawing on data from a survey conducted at an ITCA Trade Show/Conference in Cologne, March 2007. Responses were evaluated on both sectoral and regional basis. The findings suggest different perceptions by different stakeholder groups – airlines, caterers and suppliers. However there were relatively few regional differences.

Key Words: flight catering industry, external issues, industry trends

INTRODUCTION

The travel and tourism industry has always been susceptible to external changes including variations in customer expectations and demands (Wall and Mathieson, 2006; Chan, Lim and McAleer, 2005). In particular, the transportation sector is very prone to these influences, partially due to the fact that the use of transport is, by definition, not only unavoidable during travels, but also is often a major part of the trip. The fact that flight catering industry is providing food and beverage to the airlines, certainly makes it highly dependent on its clientele and hence, their clientele's business situation. The flight catering industry, a global industry of \$15 billion per annum, has been predicted to have a growth rate of about 5% annually over the next years (ITCA, 2008). In the last few years, the industry has suffered due to major events, such as the SARS outbreak in Canada and the Far East, the events of September 11, 2001 in the U.S.A., economic turbulence in Asia and Middle East, the Indonesian Tsunami, and wars in Middle East (Laws and Prideaux, 2005). These events have strongly impacted people's perceptions of travelling and have brought instability to the industry, and cause some major challenges, e.g. financial difficulties in the form of Chapter 11 Bankruptcy in North America and heightened security control in airports and land borders (Borenstein and Rose, 2003). Customers' level of confidence on the industry has decreased (Brück and Wickström, 2004) while at the same time customers have become more aware of their buying power and thus become more demanding (Zeithaml, Berry and Parasuraman, 1993). Inevitably, this applies more pressure to the industry and their chain of suppliers, including the food and beverage sector: the flight catering industry. Indeed, the current situation does not only demand the companies to be more attentive to the key issues and external trends affecting the industry, but also demand that they become more pro-active in providing solutions (Henry, 2007; Middleton and Clarke, 2001). Being attentive and pro-active is one of the keys to business success in this uncertain situation.

BACKGROUND

Both the academic and industry literature offers views on key trends and external issues, as well as on how they might impact the future of the industry. However, they nearly always view these issues from either the customers' or scholars' perspectives, arguably less from the practitioners' perspective (see Heung, 2003). The purpose of this research study was to investigate what people in the flight catering industry themselves (practitioners) consider to be the key issues and trends. The reason behind this is that 'insider's' perspectives are likely to be invaluable in complementing the customer and external observer perspectives, because the people who work in the industry, especially those with extensive experience, usually have a very good sense of the key issues and trends that are affecting or are to affect their organisations and the industry more generally. Moreover, practitioners from different industry sectors and various geographical regions may also have different perspectives. Hence, this report also investigated the extent to which different stakeholder groups within the industry (airlines, caterers, food and non-food suppliers), as well as different regional office locations – (Europe, North America, Asia-

Pacific, Middle East and Africa) shared the same or had different perceptions in regards to the challenges they face. This paper will firstly present the overall results, and then compare and contrast the results of the four sectors and four regions.

Major External Issues

Like any other industries, flight catering industry is subject to the inevitability of external forces in the business environment that cause change and require adaptation. These forces typically are major global issues, which are characterized by unpredictability. They may be caused by either nature, human activities or some combination of the two. Despite that they cannot be controlled by the industry, monitoring and responding to these issues are of paramount important for business success. Thus, companies should attempt to identify these factors at an early stage in order to develop new policies, products and services which enable them to cope with new business situations in a proactive way. The structure of environmental scanning activities usually is surrounding the political forces, economic factors, social trends, technological change, and environmental concerns (Jones, 2004). Nevertheless, these divisions are not always clear, and in most cases these events merged into each other.

Several external forces have affected industry in the last few years and are likely to continue to do so in the near future. One of the major key issues is climate change (Hamilton and Tol, 2006; Bigano, Hamilton and Tol, 2006; Wall and Mathieson, 2006.) Climate change has become a serious problem in the tourism industry in general, because the industry is not only prone to it, but also considered to contribute to the problem (Hamilton and Tol, 2006). The transport system is seen by many as one of the major sources of the issues. This certainly puts the flight catering industry in a very vulnerable position to serious business risk. As people have become more aware of climate change issues, which may also impact their travel decisions, companies need to be more attentive to providing solutions (Henry, 2007). Two other issues surrounding environmental factors are indicated as major external factors: Avian flu outbreak and Human flu outbreak. It is important that the industry is well-informed of the news on human and animal health as they are not only costly, but also deadly (Fouchier, Kuiken, Rimmelzwaan, and Osterhaus, 2005). Monitoring such outbreaks is of paramount important for ensuring food hygiene and safety in the flight catering industry. Other major external factors are caused by human activities rather than being attributable to natural causes, and are mainly focused on economic and political concerns. The turbulence economic situation has caused the increase of hike in oil price and higher taxation air travel. The high oil price continues to increase and impact the industry. This high price is caused by on-going crises in the Middle East, e.g. the recent happenings of Iraq war (2003/2004). Although all transportations incur oil costs, airlines is reported to suffer the most as the price of aviation fuel mirrors the price of oil price (Donagis, 2006). Thus, the oil price becomes airlines' major cost and cause of uncertainty, in which any downturn may result in major losses. Furthermore, the significant changes on the world order in the recent years have shown a major shift towards terrorism based on religious fundamentalism (Jones, 2004). The impact is mainly felt by the aviation industry, due to the events of 11th of September. This was witnessed by major drops in the passenger numbers around that time and for a few years subsequently. Furthermore, terrorists' attacks on major cities, e.g. bombing in London, continued to make security a major issue. For this reason, the passenger security measures are also heightened throughout the world (Rust and Venter, 2004).

Although not directly related to the flight catering industry, the impacts of the seven identified external issues are significant in general, and hence will impact daily operations through ripple effects in the travel and transportation industry. In the flight catering activities, for example, consistent monitoring of the actual number of passenger demands is necessary (Johan and Jones, 2007a). Although the number of meals served is not the same as the number of passengers, the actual passenger numbers are the basis of the meals numbers calculation. The external factors reviewed above have a major role in determining changes in passenger numbers and therefore may affect flight catering in a very significant way.

Major Industry Trends

While external issues have a general impact, industry trends have much more direct impact on the industry itself. Several themes emerged. The level of competition within the airline industry, for example, has become increasingly intense due to the growth of large firms (Jones, 2004). The major growth of low cost carriers has led to further pressure to cut costs and has caused price wars (Franke, 2004). Although history suggests that competition within the industry has always been intense, recent instability caused by government regulations/constraints, economic downfall, and natural disasters at different locations around the world have worsened the situation. The pressure to reach higher passenger numbers has increased and so has the need to monitor and control costs (see for

example Hättý and Hollmeier, 2003). As suggested by Doganis (2006), the rise of low-cost sectors possibly is the most threatening challenge facing the industry. In early 2000s, for example, it is recorded that as the larger low-cost operators continued to grow rapidly and profitably, others suffered major losses with downward trends in growth rates. The initial growth and success of the dominant low-cost carriers in Europe and U.S. (Southwest, Ryanair, easyJet and JetBlue) have provided examples and opened the door to new-entrants to the industry around the world. Furthermore, Doganis (2006) suggest that the prospect for low-cost business model is vigorous, and before long this situation will lead to a serious threat calling for a major fares reduction and even greater cost cutting.

Health, safety and security have become significant trends than ever before, due to the recent major events surrounding this theme, making security management very important. The terrorism has shadowed the world since the second half of the twentieth century, and was at its peak by the event of September 11. In the flight catering industry, authorities have imposed regulations and procedures to be applied in the carriers (Jones, 2004). The increased security system includes incorporating appropriate security measures throughout the process e.g. sealing and locking trolleys, special handling of bonded and sealed products, using see-through and sealed packaging, heightening security at the gate, screening employees and back of the house activities, etc.. Another trend closely related to the flight catering industry is around food safety and health concerns. In catering management, food poisoning outbreaks are a main concern with high levels of potential complication, e.g. costly investigations, compensation processes and business loss (MacLaurin, 2001). To avoid a breakdown in good hygiene practices, Jones (2004) recommended the implementation of food safety training, and a voluntary code of practice. Similarly, Mortlock, Peters and Griffith (2000) suggested that the benefits of hygiene training need to be more widely promoted in order to encourage managerial commitment to staff training in this area. Along with the growing public awareness around eco-consciousness, environmental issues become evident and it is clearly acknowledged that recycling is an issue for the flight catering industry. Flight catering is often subject to environmental criticism due to the use of goods that are individually packaged in quality materials that may have potential environmental impacts (Li, Poon, Lee, Chung and Luk, 2003). There are also concerns surrounding the quality and hygiene of recycling/disposal process, thus a trend towards complete automatic handling of waste and rotables has emerged as a solution (Jones and Lumbers, 2002; Jones, 2004). Although the three basic principles of sustainability (to reduce, reuse and recycle) are exercised within the industry, recycling receives the most interest as it is a means to cut costs, whereas the cost of waste disposal/incineration continues to increase sharply. In addition, more products are now made recyclable, and companies' image is highly dependent on positive publicity in this area. Indeed, recycling is an economical alternative, and thus, current efforts to recycle waste are likely to intensify, and has become a very important part of many company's policy.

Various trends around marketing have also emerged, from the issue of single seat class and increased Retail Sales on Board (RSOB) to the use of brand and packaging of the food products. The concept of single seat class and RSOB were introduced through the emergence of 'no-frills' (budget) airlines. Jones (2004) noted that airlines have experimented with various routes and different approaches to the seat class arrangements (economy, business and first class). In some cases (e.g. in some airlines), certain seat classes are eliminated. Others airlines merge two classes together, e.g. British Airways Premium Economy Class, United Airlines Economy Plus, etc., allowing them to enhance class seating through various service/products offers. In the case of low-cost airlines, for example in easyJet, no seat class exists for passengers. Indeed, they offer their seats on first come first serve basis. Furthermore, the traditionally all inclusive ticket price has changed to add-on systems. In order to offer a lower ticket price, budget airlines have eliminated some additional costs, e.g. luggage, meals, etc. from the ticket. The airlines then allow passengers to add an extra cost for these products/services, and provide an option to purchase them separately or on board. Needless to say, these trends highly impact the flight catering industry. The demand of the food and beverage products decrease and meal forecasting has become more complicated than ever. Although it is a recently new idea, the concept of selling food onboard services prevails for some airlines (Mombberger and Mombberger, 2003). Furthermore, these trends are now supplemented with the idea of pre-boarding purchase.

Traditionally highly identifiable branded goods are offered as a duty free goods and alcohol within the airlines industry, yet branding concept is now also used in the food and beverage products/services, e.g. a brand of butter or jam. According to Bell (1997), supplying passengers with well-known branded products, will take advantage of their quality – recognition factor and wide-spread popularity. Indeed, using reputable brand is considered to leverage the reputation of the carriers, which is associated with brand loyalty, prestige value-advertising, quality assurance, consistency and uniformity, as well as increase ease in purchasing (Middleton and

Clarke, 2001). Furthermore, there is a close link between branding and outsourcing in this area, as many more carriers now start to outsource their food and beverage productions to a brand or chain restaurants, e.g. pizza/pasta restaurant. Along with the concepts of branding and outsourcing, it is very likely that the concept of packaging will develop further (Jones, 2004). There is also increasing demand (mainly by the health-conscious passengers) that requires a package design which assures security (e.g. see-through and seal materials for packaging), and clearly states ingredients and nutrition information.

Another major trend is the influence and impact of Information Technology (IT), particularly the Internet, in changing the market situation in the last few years. Technological development provides many benefits through opportunity for process re-engineering and outsourcing (Jones, 2004). Indeed, e-commerce and IT are changing the nature of business, and are now more important than ever (Werthner and Ricci, 2004). Outsourcing has become possible due to the ability of IT to improve supply chain management and procurement. Furthermore, the effective use of it is not only in the area of sales and distribution through cost reduction and revenue improvement (Doganis, 2006), but also in the area of equipment technology. An example is the RFID Equipment Tracking within the airlines industry. As suggested by Jones (2004:256), it is now possible to exert control over galley equipment from the ground through the internet: automatic switched-on and off from the ground to ensure the right temperature and timing, and constant monitoring. As more control of all food aspects are done from the ground, staff (cabin crew) are able to concentrate on serving passengers and providing a better quality of service. Also, tracking and locating equipments from the ground is possible, which enables tighter and more efficient control. Indeed, the introduction of new technology holds much potential for the integration of various functions. This requires the industry to adopt proactive attitudes towards IT rather than being merely responsive. A further major development in technology is the introduction of one A380. In addition to more space for all seats, it will also offers flexibility by allowing galleys, lavatories and stowages to be located in different numbers, groupings and locations (Airbus, 2008). Another advantage of the A380 for flight catering is that the aircraft will have two sets of doors which will reduce the turnaround time, and thus increase efficiency. Another industry trend which is potentially important is outsourcing of IT function. Two activities of the flight catering can be outsourced: food production and catering logistics function. The outsourcing of food processing and production means shifting some activities (e.g. food preparation and packaging) and responsibility (e.g. food safety) to the suppliers. Much of the production activity in kitchens is being outsourced to food manufacturers and suppliers; the extent of food production outsourcing varies from minimal outsourcing (involving some parts of the production) to maximum outsourcing (all process was outsourced to arrive at a final product). The minimum responsibility for the carriers at the last stage is storing at the safe temperatures and rotating stock. Not only can food production be outsourced, but also many aspects of the logistics function. For instance, many of manufactured and retail goods are managed by other companies, to ensure that all duty free goods, including alcohol, are stored properly and are available and ready for loading at a given time. By partially or entirely outsourcing the logistics function, the companies are able to concentrate on its core business. As Doganis (2006) suggested, the key question is no longer whether outsourcing is necessary, but 'to what degree' it should be done. Needless to say, pressure on costs and increased competition requires flight catering companies to re-think their business model.

While outsourcing has become the major area of research, the increased role of distributors has also been subject for query within the industry (Doganis, 2006). The existence of distributors is relatively new within the industry, and is due to the complexity of supply chain management. Their role is to distribute goods, and in some cases also to provide a tracking system that allows cost reduction, as well as, quality and brand identification. There are two main types of manufacturer: manufacturers supplying standard products and manufacturers supplying specialist products specifically designed for the in-flight market. It is beneficial to work with distributors, because they can find a product or a company to design any type of product that the airline or caterer might want. This will create a smoother production and line, and also save both space and labour, as some of the processes, especially of the special products, are not made in house. In addition, they could be cheaper as distributors may be able to exercise economies of scale due to large number of purchase.

Finally, it should be noted that these external trends are interrelated and also related to the external issues. Changes in one of the issues or trends may have an impact on the others, for example, the growth in outsourcing and the potential increase in retail sales on board, suggests that there may be continued growth in branding (Jones, 2004). Thus, monitoring each of the issues and trends is important in order to keep sight of the overall picture and the inter-relationships between the various factors outlined above. Furthermore, being proactive in understanding how these

trends may impact each other in forecasting the sources and impacts of the issues and trends (Nickson, 2000). A better understanding and awareness of the driving factors leading to change in the industry is a good starting point. Despite the situation has improved in the last few years compared to the situation in 2000/2001, the industry cannot rest on its laurels. The industry needs to continue to improve its performance through environmental scanning by making investments into future opportunities to enhance its coping ability to the unpredictable industry. The major external issues and industry trends identified in the literature are summarized in Table 1.

Table 1
External Issues and Industry Trends

External Issues	Industry Trends
1. Climate change	1. Increased competition in the airline industry
2. Terrorists attacks in major cities	2. Increased security management
3. Hike in oil price	3. Outsourcing of food production
4. Higher taxation on air travel	4. Outsourcing of catering logistics function
5. Increased passenger security measures	5. Increased role of distributors
6. Avian flu outbreak	6. Increase use of internet based IT
7. Human flu outbreak	7. Increase in single seat class airlines
	8. Increased Retail Sales on Board (RSOB)
	9. Increased branded food products on tray sets
	10. Reduction in packaging
	11. Increased concerns on food safety and health
	12. Increase in recycling
	13. Growth in low cost airlines
	14. Adoption of RFID for equipment tracking
	15. Introduction of A380

METHODOLOGY

The aim of the research was to explore practitioners' views on external issues and industry trends, which if monitored and responded to appropriately could be keys to business success. Data for this study were gathered through a paper and pencil survey and also as online survey during and after the ITCA Trade Show and Conference in Cologne, Germany March 7-9th, 2007. The survey consists of three sections, where the participants are asked to indicate: 1) level of concern or involvements of external issues and industry trends; 2) level of impacts of these external issues and industry trends; and 3) timing of these impacts.

In the first section of the survey, the respondents were asked how concerned or involved they are with seven major external issues and 15 industry trends affecting the flight catering industry, on a scale of 1 (no concern/involvement) to 5 (very great concern or involvement). The second section provides results on the responses with regard to the level of impacts they believe various factors will have on the business performance of their company. In this section, the respondents were asked to measure the level of impacts on five point scale ranging from 1 (no extent) to 5 (very great extent). In the third section, the respondents were asked the timing they foresee for these external issues and industry trends in relation to their companies. The findings indicate whether the respondents believe that these issues are to take place short term (less than 2 years) or longer term (more than 2 years). For the purpose of this research, data then were analyzed by means of Analysis of Variance in SPSS. Concluding the survey was the demographic questions section. Respondents were asked to indicate their demographic data, including gender, age, previous trade show attendance and job role. The majority of the respondents are male (72%), and the respondents are diverse in terms of their age: below 25 years (1%), 25-34 years (26%), 35-44 years (32%), 45-54 years (28%) and 55+ years (13%). The majority of the respondents (35.7%) have previously attended 4 to 10 trade shows, while 22.4% has attended more than 10 trade shows. Meanwhile, only 18.2% of the respondents have never attended a trade show before, and the remainder (23.8%) have previously attended 1-3 trade shows. The respondents profile suggest that majority of the participants' job roles are general management (36.9%) and sales and marketing (38.3%), followed by operations (11.4%), consultants (3.5%) and others (9.9%).

Analysis by Sectors and Regions

Respondents were asked to indicate the sector of the flight catering industry their company represented, to enable valid comparisons between sectors. All sectors are well represented: airlines (N=39, 25%), caterers (N=33, 21%), food suppliers (N=32, 21%), with non-food suppliers (N=52, 33%) as the largest sub-group. This may be explained by the fact that majority of the exhibitors at this particular type of trade show are non-food suppliers. In total, the number of participants was 156, however the number of usable responses vary for individual questions and can be found in the full report of Trends in the Travel Catering Industry Survey (see Johan and Jones, 2007b). Additionally, respondents were also asked to indicate their current office location. Although the majority of respondents are based in Europe (N=81, 57%), followed by Asia Pacific (N=32, 22%) and North America (N=17, 12%), the respondents are diversely located in all continents around the world (Middle East and Africa, N=13, 9%). This strong representation of European participants can be explained by the fact that the survey was conducted at the ITCA Trade Show and Conference in Germany. These two demographics data will be used in evaluating the results of the survey, in order to understand practitioners' perspectives in terms of both sectors and regions.

RESULTS

The results of the survey will be described in terms of major external issues and industry trends. Within each, the overall result will be presented, then, the results of four sectors and four regions will be compared and contrasted to highlight differences and similarities along with any statistically significant differences.

Major external issues

Level of Concerns

When the respondents were asked how concerned they are with the seven major external issues and 15 industry trends affecting the flight catering industry, the overall finding suggests that a hike in oil price is the highest concern within the industry (3.66), followed by higher taxation on air travel (3.38) and terrorists' attacks in major cities (3.35). On the other hand, the survey respondents believe that a human flu outbreak is of least concern (2.97), followed by climate change (2.99). **Sectors.** Hike in oil price remains the most important issue across sectors, signifying its importance to the industry. The finding suggests that airlines and caterers share similar concern, and the two supplier groups do the same. Furthermore, the findings also highlight a number of significantly statistical differences, suggesting that suppliers group at large are less concerned than airlines or caterers: (a) both food suppliers are significantly less concerned than airlines about both increased passenger security measures ($p < 0.001$), and climate change ($p = 0.004$); (b) food suppliers are also significantly less concerned about increased passenger security measures than caterers ($p < 0.001$), and less concerned about terrorist attacks in major cities than Airlines, caterers and non food suppliers ($p = 0.007$). **Regions.** Although they are in no particular order, the top three rankings for different regions follow the pattern of the overall rankings. Avian flu outbreak is an exception, in which it was indicated as a new issue by Asia Pacific (3.70) on their top three rankings. On the other hand, there is no overall pattern for the two lowest rankings. It is suggested that Europe is significantly less concerned about Avian flu outbreak than Asia Pacific ($p = 0.004$), and also about Human flu outbreak than Asia Pacific and Middle East and Africa ($p < 0.001$).

Level of Impacts

The respondents indicated the same top three issues as in the first section for level of concern: hike in oil price (3.65), terrorists' attacks in major cities (3.49), and higher taxation on air travel (3.24). These findings suggest that these three issues are not only of major concern, but also are seen to have the most impact on business performance. On the contrary, climate change (2.83) is noted as the least impact on their daily operations, in agreement with their response indicating the least level of concern, followed by increased passenger security measures (2.94). **Sectors.** Although the overall top three issues and the lowest two issues are echoed by almost all sectors, a few exceptions apply. Three external issues show statistically significant differences among sectors. For example, airlines perceive more impact from climate change ($p = 0.001$), and higher taxation on air travel ($p = 0.007$) than non-food suppliers, and also identify greater impact from increased passenger security measures ($p < 0.001$) than both suppliers. **Regions.** The top three rankings mirror the overall rankings pattern, with a few exceptions considered as the most impacting issues by different regions. The statistically significant differences are noted in three external issues between Asia Pacific and other regions. Asia Pacific perceives more impacts from increased passenger security measures ($p = 0.010$) and Human flu outbreak ($p = 0.016$) than Europe. Additionally, Asia Pacific also perceives more impact with regard to the issue of Avian flu outbreak ($p = 0.003$) than Europe and Middle East and Africa.

Timing of Impacts

In term of timing (see Table 2), 63.9% of participants suggest climate change will have long term impact on the industry (>2 years). On the other hand, three issues are believed to have the most immediate impacts within the next two years: terrorists' attacks in major cities (76.5%), hike in oil price (73.8%) and increased passenger security measures (67.9%). For the purpose of this paper, the analysis on the timing of events by regions or sectors will not be discussed. However, these data are available in the full report (see Johan and Jones, 2007a).

Major industry trends

Level of Concerns

The overall result suggests increased competition in the airline industry (3.46) is the trend in which industry is most involved in, followed by increased concern on food safety and health (3.38) and increase use of internet (3.36). Respondents suggest adoption of RFID for equipment tracking (2.24) to be the trend with the least level of involvement, followed by introduction of A380 (2.28). **Sectors.** In most cases, airlines and caterers share the same view as with the overall pattern, whereas suppliers only share some views. Indeed, nine industry trends were identified with statistically significant differences, confirming that airlines and caterers tend to be more involved in most industry trends than their suppliers' counterparts. For example, the finding indicates that airlines are significantly more involved in the issues of increased competition in the airline industry ($p=0.001$) than both suppliers, and of increase use of internet based Information Technology ($p=0.005$) than food suppliers. It is also suggested that caterers are significantly more involved in the increase in single seat class airlines ($p=0.055$) than non food suppliers. Furthermore, airlines and caterers have more involvement in the issue of increased security management ($p<0.001$) than food and non food suppliers and outsourcing of catering logistics function compared to non food suppliers ($p=0.001$). On the other hand, a statistically difference exists for four industry trends, in which non food suppliers are significantly less involved than other sectors, i.e. in the outsourcing of food production ($p<0.001$), the increased branded food products on tray sets ($p<0.001$), reduction in packaging ($p<0.001$) and increased concern of food safety and health ($p<0.001$). **Regions.** Increased competition in the airline industry remains the top ranking for most regions, with exception of Europe. Otherwise, all regions roughly share similar level of involvement with the overall trends. Three industry trends were identified to have statistically significant differences. Europe is significantly less involved in the increased security management ($p=0.011$) and the increase in single seat class airlines compared to Asia Pacific ($p=0.017$). In the introduction of A380, however, Europe is significantly less involved compared to both Asia Pacific and Middle East and Africa ($p<0.001$).

Level of Impacts

The findings suggest that the industry is likely to receive the biggest impact from increased competition in the airline industry (3.62), followed by increase use of internet (3.31) and growth in low cost airlines (3.25). The trend in which is believed to have the lowest impact on the industry is the adoption of RFID for equipment tracking (2.4), followed by introduction of A380 (2.51). **Sectors.** Increased competition in the airline industry remains to be the overall and sectoral top rankings, however only a few of the remaining top three rankings and lowest two rankings are recognized by all sectors. Statistically significant differences were recognized in the following industry trends. Airlines are perceived to receive significantly more impacts from increased competition in the airline industry ($p=0.002$) and increased security management than both suppliers ($p<0.001$). On the other hand, non food suppliers are perceived to have a significantly lower level of impact from the issue of outsourcing of food production ($p<0.001$) and increased concern on food safety and health ($p<0.001$) compared to other sectors, as well as from increased branded food products on tray sets than airlines and food suppliers ($p=0.005$). On the issue of increased role of distributors ($p=0.008$), however, both airlines and non food suppliers perceive a lower level of impact than food suppliers. **Regions.** For all regions, some industry trends show a similar pattern to the overall finding: increased competition in the airline industry, increase use of internet and growth in low cost airlines. Yet, no agreement is reached among regions on the lowest ranking. Furthermore, only one of the industry trends shows a statistically significant difference ($p<0.001$), in which Asia Pacific perceives a higher level of impact from introduction of A380 compared to Europe.

Table 2.
External Issues and Industry Trends (Percent Long Term and Percent Short Term)

External Issues			Industry Trends		
	Short Term	Long Term		Short Term	Long Term
1. Climate change	36.1%	63.9%	1. Increased competition in the airline industry	87.6%	12.4%
2. Terrorists attacks in major cities	76.5%	23.5%	2. Increased security management	77.9%	22.1%
3. Hike in oil price	73.8%	26.2%	3. Outsourcing of food production	76%	24%
4. Higher taxation on air travel	66.2%	33.8%	4. Outsourcing of catering logistics function	73.1%	26.9%
5. Increased passenger security measures	67.9%	32.1%	5. Increased role of distributors	69%	31%
6. Avian flu outbreak	65.9%	34.1%	6. Increase use of internet based IT	58.9%	41.1%
7. Human flu outbreak	58.8%	41.2%	7. Increase in single seat class airlines	60.5%	39.5%
			8. Increased Retail Sales on Board (RSOB)	76%	24%
			9. Increased branded food products on tray sets	58.1%	41.9%
			10. Reduction in packaging	74.2%	25.8%
			11. Increased concerns on food safety and health	79.8%	20.2%
			12. Increase in recycling	67.7%	32.3%
			13. Growth in low cost airlines	76.7%	23.3%
			14. Adoption of RFID for equipment tracking	58.6%	41.4%
			15. Introduction of A380	62%	38%

Timing of Impacts

The overall results suggest that all industry trends are likely to have immediate impact, varying from 58.1% to 87.6%. The most immediate impact is predicted to arrive from increased competition in the airline industry (87.6%), followed by increased concern of food safety and health (79.8%) and increased security management (77.9%). The participants also believe that three industry trends have both short term and long term impacts in the industry by nearly 60/40 ratio with inclination towards short term: increase use of internet based IT, increased branded food products on tray sets, and adoption of RFID equipment tracking.

DISCUSSION AND CONCLUSION

External Issues

Among all sectors, airlines are the most concerned on all of the external issues, and also see themselves as receiving the most impact from these external issues compared to other sectors. Quite the opposite, the suppliers generally are not only less concerned, but are also likely to receive the least impact. Overall, there are no major differences among regions. Some exceptions exist, mainly with Asia Pacific being significantly more concerned seeing themselves as receiving more impacts, whereas Europe is comparatively less concerned and receives less impact on these external issues. If compared between the overall level of concern and level of impact, the same top rankings persist, with hike in oil price as the issue of the overall highest concern. On the other hand, climate change remains to be one of the lowest rankings in term of both level of concern and level of impact.

Industry Trends

The overall pattern suggests that airlines, followed by caterers, are significantly more concerned and also are likely to receive more impact than other sectors. On the other hand, suppliers are significantly less concerned and receive less impact than other sectors. Similar patterns are identified across regions, with a few exceptions. However, the view that Asia Pacific (and Middle East) is generally more concerned on some trends than Europe is still true. Increased competition in the airline industry consistently is perceived as both the issue of the overall highest concern and highest level of involvement, whereas the opposite is true that the adoption of RFID for equipment tracking as the trend of the overall least concern and lowest impact.

Limitations and Future Research

This study has a number of limitations. First, it is limited by the use of convenience sampling, which may introduce a potential bias. The participants recruited were delegates and exhibitors at the trade show and conference who visited the ITCA booth, or were approached by the researchers during the three-day period. Second, this research uses two methods of administration: paper and pencil questionnaire during the conference and on-line survey during and after the conference (follow-up participation request via e-mail). This may produce certain restriction than if all participants would have filled the questionnaire under the same conditions. Finally,

participants' perceptions may be constrained by the use of pre-determined list in the questions. However, this issue was addressed by the facility for respondents to specify issues that they believe are relevant. Future research includes continuing this survey on an annual basis. This project is the first of an annual trends survey. The second project is planned for March 2008 for ITCA Trade Show and Conference in Nice, France, where the participants will participate in on an online survey to provide their opinions on the current external issues and industry trends. The purpose of establishing this longitudinal study is to provide not only a snap shot of industry opinion each year, but also to map the way in which the industry is changing and the key trends affecting it over time. Other future research includes updating the issues surveyed accordance with developments in the industry, and expanding the study by exploring the impactful issues in more depth, for example by means of interviews. The emphasis in this project has been upon the airline industry. Future research might include a greater representation of other modes of transport.

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Appendix 1. Means for average of external issues and major industry trends as overall and by sectors and regions

	Overall		Sector								Region							
			Airlines		Caterers		Food Suppliers		Non-food Suppliers		Asia Pacific		Europe		America		Middle East/ Africa	
	C	Im	C	Im	C	Im	C	Im	C	Im	C	Im	C	Im	C	Im	C	Im
External Issues																		
Climate change (N=152)	2.99	2.83	3.47*	3.41 [†]	3.27	2.93	2.57*	2.8	2.71*	2.41 [†]	3.23	2.90	2.94	2.76	2.50	2.69	3.62	3.08
Terrorists attacks in major cities (N=153)	3.35	3.49	3.58*	3.72	3.48*	3.75	2.60*	3.13	3.52*	3.41	3.61	3.69	3.18	3.34	3.25	3.38	3.92	3.83
Hike in oil price (N=151)	3.66	3.65	3.95	4.00	3.61	3.43	3.57	3.57	3.52	3.59	3.87	3.71	3.61	3.58	3.44	3.88	3.67	3.58
Higher taxation on air travel (N=152)	3.38	3.24	3.63	3.75 [†]	3.18	3.39	3.29	3.10	3.36	2.90 [†]	3.38	3.29	3.30	3.23	3.13	3.00	4.08	3.33
Increased passenger security measures (N=152)	3.01	2.94	3.76*	3.72 [†]	3.30*	3.11	2.30*	2.61 [†]	2.69	2.53 [†]	3.07	3.35 [†]	2.81	2.70 [†]	2.94	2.69	3.46	3.58
Avian flu outbreak (N=152)	3.11	3.19	3.47	3.47	3.03	3.39	2.77	2.97	3.08	3.04	3.70*	3.87 [†]	2.78*	3.03 [†]	2.88	3.00	3.31	2.58*
Human flu outbreak (N=152)	2.97	3.17	3.18	3.34	3.06	3.43	2.63	3.10	2.96	2.96	3.60*	3.81 [†]	2.59*	3.00 [†]	2.69	2.94	3.62*	2.83
Industry Trends	In	Im	In	Im	In	Im	In	Im	In	Im	In	Im	In	Im	In	Im	In	Im
Increased competition in the airline industry (N=151)	3.46	3.62	4.05*	4.09 [†]	3.53	3.75	2.97*	3.17 [†]	3.25*	3.49 [†]	3.63	3.84	3.19	3.45	3.88	3.81	4.09	3.91
Increased security management (N=150)	2.90	2.82	3.66*	3.56 [†]	3.50*	3.18	2.23*	2.31 [†]	2.34*	2.42 [†]	3.29*	3.10	2.56*	2.60	2.81	3.13	3.45	2.82
Outsourcing of food production (N=149)	2.85	2.90	3.29*	3.16 [†]	3.38*	3.39 [†]	3.29*	3.48 [†]	1.85*	2.09 [†]	2.61	2.70	2.80	2.96	3.06	3.13	2.30	2.50
Outsourcing of catering logistics function (N=150)	2.88	3.02	3.29*	3.03	3.19*	3.43	2.97	3.00	2.31*	2.79	2.71	2.80	2.82	3.05	3.31	3.56	2.55	2.50
Increased role of distributors (N=151)	3.06	3.17	3.29	2.97 [†]	3.19	3.32	3.25	3.73 [†]	2.67	2.85 [†]	2.94	2.97	2.93	3.10	3.50	3.50	3.50	3.70
Increase use of internet based IT (N=151)	3.36	3.31	3.82*	3.59	3.56	3.36	2.87*	2.93	3.20	3.32	3.61	3.47	3.15	3.15	3.50	3.69	3.45	3.30
Increase in single seat class airlines (N=150)	2.31	2.54	2.34	2.66	2.72*	2.79	2.29	2.45	2.02*	2.38	2.68*	2.60	2.06*	2.41	2.56	2.94	2.80	2.90
Increased Retail Sales on Board (RSOB) (N=149)	2.93	3.01	2.89	3.00	3.13	3.00	3.00	3.21	2.78	2.89	2.87	2.60	2.97	3.15	3.25	3.44	2.70	2.60
Increased branded food products on tray sets (N=150)	2.82	2.78	3.29*	3.03 [†]	3.09*	3.00	2.97*	3.14 [†]	2.18*	2.26 [†]	2.97	2.73	2.69	2.79	3.06	3.13	2.50	2.30
Reduction in packaging (N=148)	3.01	2.96	3.29*	3.22	3.28*	3.04	3.40*	3.24	2.38*	2.57	3.06	2.93	2.95	2.97	3.13	2.69	2.80	3.30
Increased concerns on food safety and health (N=149)	3.38	3.17	3.68*	3.63 [†]	3.91*	3.46 [†]	3.70*	3.34 [†]	2.59*	2.57 [†]	3.48	3.41	3.32	3.12	3.13	2.88	3.27	3.30
Increase in recycling (N=150)	3.25	3.10	3.45	3.44	3.47	3.14	3.30	3.03	2.92	2.87	3.13	3.21	3.24	3.10	3.13	2.50	3.42	3.64
Growth in low cost airlines (N=151)	3.10	3.25	2.97	3.28	3.25	3.11	3.23	3.21	3.02	3.34	3.42	3.41	3.01	3.19	3.25	3.00	2.58	3.64
Adoption of RFID for equipment tracking (N=148)	2.24	2.40	2.47	2.53	2.39	2.75	2.07	2.14	2.08	2.26	2.26	2.48	2.21	2.29	2.31	2.50	2.45	2.73
Introduction of A380 (N=149)	2.28	2.51	2.32	2.59	2.47	2.96	1.87	2.10	2.37	2.44	3.00*	3.24 [†]	1.99*	2.18 [†]	2.38	2.44	3.00*	3.17

C="Please indicate your level of concern, in your current job role, about the following:" (1=No concern to 5=Very great concern);

In="Please indicate your company's level of response to the following:" (1=No involvement to 5=Very great involvement)

Im="Please indicate the level of impact you believe the following will have on the business performance of your company:" (1=No extent to 5= Very great extent)

* and [†] refer to statistically significant differences between different four sectors or four regions for each external issue or industry trend.

THE POST-ACQUISITION PERFORMANCE IN THE HOSPITALITY INDUSTRY

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ABSTRACT

This study provides an empirical illustration of post-acquisition performance in the hotel and restaurant industries, using merger and acquisition announcements from 1980 to 2004. Particularly, this study considers the method of payment and mode of mergers in investigating the dynamics of merger and acquisition announcements in the hospitality industry. Overall, the findings showed that merger and acquisition announcements have a little positive impact on both acquiring and acquired hospitality firms' stock prices even though they are not statistically significant.

Key Words: mergers, acquisitions, payment method, merger mode, event study.

INTRODUCTION

The steady increase of mergers and acquisitions in the hospitality industry has aroused interest among investors, managers, and scholars. Since maximization of a firm's value is the utmost purpose and role of any management, a number of empirical studies have attempted to test if corporate mergers and acquisitions increase a firm's overall value. It is clearly understood that the shareholders of acquired or target firms financially benefit from mergers and acquisitions. Yet, the financial returns for shareholders of acquiring firms are questionable. While there is significant body of research on post-acquisition performances, there are only a handful of studies concerning post-acquisition performances of hospitality companies. Nevertheless, empirical evidence from the studies is not consistent. Like studies on post-acquisition performances in other industries and across industries, studies on hospitality corporations' post-acquisition performances agree that financial market value of acquired firms increased after mergers and acquisitions (e.g., Kwansa, 1994; Canina, 2001). However, it is contradictory whether the shareholders of acquiring firms benefit from mergers and acquisitions. Canina (2001) reported that merger and acquisition events resulted in benefits to the shareholders of the acquiring companies. In contrast, Sheel and Nagpal (2000) and Hsu and Jang (2006) provided evidence that mergers and acquisitions did not result in gains for the shareholder of the acquiring hospitality companies.

Considering the sharp increase in mergers and acquisitions in the hospitality industry for the past two decades, it is timely to study the post-acquisition performances of hospitality firms with newly available data. This study aims to investigate the post-acquisition performance of both acquiring and acquired companies in the hotel and restaurant industries. Prior studies showed that the post-acquisition performance of firms differed in terms of mode of acquisitions (Jensen & Ruback, 1983; Canina, 2001; Loughran & Vijh, 1997) and payment methods (Loughran & Vijh, 1997; Agrawal, Jaffe, & Mandelker, 1992). Therefore, this study considers mode of acquisitions (i.e., merger or tender offer) and payment methods (i.e., cash, stock, or mixed). The current research is an extension of post-acquisition financial performance research in the hospitality industry in that it incorporates newly available data. In addition, this study considers the method of payment and mode of mergers since previous studies in finance literature revealed that post-acquisition performance differed in terms of the method of payment and mode of mergers. Further, previous studies in the hospitality industry have primarily focused on the lodging industry. However, this study extends previous study by exploring post-acquisition financial performance in the restaurant industry as well as the lodging industry.

EMPIRICAL EVIDENCES IN THE HOSPITALITY INDUSTRY

The market-based performance measure is probably the most common measure utilized in studies concerning post-acquisition performances of firms (Sirower, 1997; King, Dalton, Daily, & Covin, 2004). Kwansa (1994) stated that “most of studies on acquisitions have concentrated on impact, especially in relation to increased shareholder wealth (p.17).” Even though there are critics against market-based performance measures such as failure in separating a firm’s merger-related economic gains (Healy, Palepu, & Ruback, 1992), numerous studies have utilized market-based measures (e.g., Brown & Warner, 1985; Agrawal, Jaffe, & Mandelker, 1992; Kwansa, 1994; Loughran & Vijh, 1997; Canina, 2001). The main reason for the preference of market-based performance measures is that the stock market is highly efficient and it incorporates newly available market information into the share prices of both the acquiring and target firms, implying that these measures represent the economic gains of mergers and acquisitions. In an earlier study, Kwansa (1994) investigated the amount of wealth created for the shareholders of target hotels surrounding merger and acquisition announcements using 18 hotel firms involved in mergers and acquisitions for the period of 1980 through 1990 and an event window of 61 trading days. The findings revealed that the shareholders of the target hotels benefited from the acquisition announcements between 1980 and 1990. Especially, the cumulative average residual (CAR) for the 18 target hotels increased approximately 400% between days -2 to +2 (from 7.63 to 28.63). Based on the findings, Kwansa (1994) concluded that the stock market is efficient in valuing hotel stocks.

On the other hand, Canina (2001) investigated stock returns surrounding merger and acquisition announcements in the hotel and hotel real estate investment trust (REIT) industries using the event study approach. Her investigation covered stockholders of both acquiring and target companies including both public and private companies. The findings showed extremely large abnormal returns (8.9%) for target companies on the announcement day. For the following day (+1), the abnormal returns for the target firms were also positive and significant (1.3%). For the acquiring firms, the results also showed significant positive abnormal returns (1.3%) on the announcement day. However, the abnormal returns for the acquiring firms on the following announcement day (+1) were negative and not significant (-0.2%). At the same time, the study examined mergers and tender offers separately. The results showed that “wealth gains ensuing from lodging-industry tender offers are significantly greater than those of mergers (p. 54).” Based on the findings, Canina (2001) concluded that the shareholders of both acquiring and target hospitality firms benefit from merger and acquisition announcements.

Hsu and Jang (2006) also examined whether the stockholders of acquiring hotels gained financial returns from merger announcements using the event study method. They estimated normal returns for the shareholders of acquiring hotels using 200 days of stock trading (-250 days to -50 days) and calculated abnormal returns for an event window of 11 trading days (-5 days to +5). The findings revealed that the shareholders of acquiring hotels earned no abnormal returns following merger and acquisition announcements. On the other hand, Sheel and Nagpal (2000) studied post-acquisition equity value performance for acquiring hospitality firms involved in mergers and acquisitions for the period of 1980-2000, which encompassed 21 hospitality firms. They utilized the Jensen Measure Model to calculate the long run abnormal equity value performance of the acquiring firms. Sheel and Nagpal (2000) calculated normal return between the 36 months prior to announcements and 7 months prior to announcements. In addition, they utilized a long event window period compared to other studies related to hospitality firms (-6 month to +36 month). The results indicated the CAR increased slightly in the first month (from -17.99 to -16.86) although the amount was not significant, which, according to them, suggested the introduction of possible biases due to market speculation. However, the study also revealed that the acquiring hospitality firm’s equity values declined significantly (CAR of -176.67 at +36 month) in the long run, indicating that the shareholders of acquiring hospitality firms gained negative returns subsequent to mergers and acquisitions. Following the methodology used by Sheel and Nagpal (2000), Hsu and Jang (2006) also investigated long-term market performance of acquiring hospitality industry during the period 1985 to 2000. The findings indicated that the equity value of acquiring hospitality firms had decreased significantly for the 36 months following mergers and acquisitions, which were consistent with the findings of Sheel and Nagpal (2000).

To date, studies on post-acquisition performance in the hospitality industry frequently used the event study approach and CAR, a percent return, was favorably employed as a performance measure. Based on the findings from prior studies, it is well understood that the stockholders of acquired firms in the hospitality industry earn financial gains from merger and acquisition announcements as do in other industries (Kwansa, 1994; Canina, 2001). Yet, whether the stockholders of the acquiring hospitality firms gain financial returns from merger and acquisition

announcements remains much less certain. For instance, Canina (2001) reported that the shareholders of acquiring firms in the hospitality industry gained small abnormal returns following merger and acquisition announcements. On the contrary, Hsu and Jang (2006) documented that the shareholders of acquiring hotels earned no abnormal returns after merger and acquisition announcements. Furthermore, Sheel and Nagpal (2000) argued that the shareholders of acquiring hospitality firms gained negative returns subsequent to merger and acquisition announcements.

DATA COLLECTION PROCEDURE

This study utilizes the secondary data extracted from *Securities Data Company* (SDC) and *Center for Research in Security Prices* (CRSP). First, completed M&A transactions for the hotel (SIC code of 7011) and restaurant (SIC code of 5812) industries from 1980 to 2004 were retrieved from SDC database in which either acquirer's or target's SIC code was 7011 (hotels) or 5812 (restaurants). Second, deals with small amount of transaction value were dropped out from the initial list. For the hotel industry, deals less than \$20 million were eliminated. In addition, deals less than \$10 million were removed from the list for the restaurant industry. Then, only hospitality companies that were listed in *National Association of Securities Dealers Automated Quotation System* (NASDAQ), *American Stock Exchange* (AMEX), or *New York Stock Exchange* (NYSE) were included. Further, companies were retained only when they were included in the CRSP database so that the researcher could obtain daily closing stock prices. Finally, when a company was involved in multiple M&As within three years, the largest deals were retained. However, if a company made multiple M&As over three years, each transaction was treated independently. The above procedure led to 91 observations in the hotel industry and 159 observations in the restaurant industry.

Table 1
The Number of Observations Included in the Study

Hotel industry						Restaurant industry					
	Merger mode		Payment method				Merger mode		Payment method		
	Merger	Tender offer	Cash	Stock	Mixed		Merger	Tender offer	Cash	Stock	Mixed
Acquirer (n=38)	36	2	13	8	17	Acquirer (n=79)	72	7	40	18	21
Target (n=53)	39	14	22	5	26	Target (n=80)	52	28	53	10	17
Total (n=91)	75	16	35	13	43	Total (n=159)	124	35	93	28	38

COMPUTATION OF ABNORMAL RETURNS

The event study approach is one of the market-based performance measure approaches and assumes that the stock prices of both acquiring and acquired firms change rapidly at or around merger and acquisition announcements since the stock prices quickly reflect available information. The primary goal of this approach is to decide if the stockholders of either or both acquirers and targets earn abnormal returns because of the merger and acquisition announcements. Thus, the event study approach measures the response of the stock price performance against an estimate of expected (or normal) return based on prior performance. When the observed returns are statistically different from the expected returns, it is concluded that merger and acquisition announcements affect the value of firms. Most previous studies utilizing the event study approach relied on the market model proposed by Brown and Warner (1980; 1985) which is considered as a standard procedure in the event study approach (e.g., DeLong, 2003; Delaney & Wamuziri, 2004; Hsu & Jang, 2006). The market model is based on the capital asset pricing model (CAPM) and utilizes the ordinary least square estimator. In addition, the market model considers both the past performance of the stock and the sensitivity to the overall market changes in the measurement of excess returns. Following previous studies, this study adopts event study approach. Most previous studies utilizing the event study approach relied on the market model proposed by Brown and Warner (1980; 1985). The standard specification of the market model is as follows:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}, \quad (1)$$

where, α_i is the intercept, β_i is the beta coefficient or slope, ε_{it} is the random error term or the residual portion, R_{mt} is the return of the market portfolio for day t , and R_{it} is the return of the i th stock for day t .

The expected (or normal) return of the stock is written as:

$$E(R_{it}) = \alpha_i + \beta_i R_{mt}, \quad (2)$$

where, α_i is the intercept, β_i is the beta coefficient or slope, and R_{it} and R_{mt} are the returns on the i th stock and the market portfolio for day t , respectively.

On the other hand, the abnormal returns are calculated based on the following equation:

$$A_{it} = R_{it} - E(R_{it}) = R_{it} - \alpha_i - \beta_i R_{mt}, \quad (3)$$

where, A_{it} is the abnormal return for a given stock i for day t , R_{it} is the observed or actual return of stock i for day t , and $E(R_{it})$ is the estimated return of stock i for day t which is derived from the equation (2).

Using the equation (3), the abnormal return for each event day is then averaged across all companies in the sample to calculate an overall average abnormal return based on the following equation:

$$AR_t = \frac{\sum_{i=1}^N A_{it}}{N}, \quad (4)$$

where, AR_t is the mean abnormal return for a portfolio of securities for day t and N is the number of companies in the sample.

Finally, daily abnormal returns are summed over the event window period to obtain cumulative abnormal return (or residual) using the following formula:

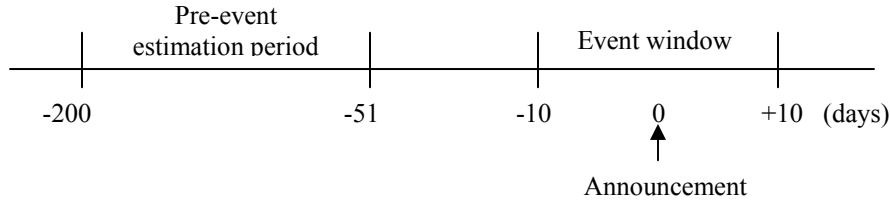
$$CAR_{t1}^{t2} = \sum_{t=t1}^{t2} AR_t \quad (5)$$

where, CAR_{t1}^{t2} is the cumulative abnormal return, $t1$ is the first period in which the AR_t are accumulated and $t2$ is the last period in which the AR_t are accumulated.

Because the daily abnormal return is the average of the difference between the actual returns and the expected returns, both daily abnormal returns and cumulative abnormal return should fluctuate around zero. Otherwise, it is concluded that the event (M&A announcements in this case) affected stock price valuations of the market (Peterson, 1989). Since isolating the effect of M&As on stock prices is difficult, an important methodological consideration concern is how long the event window should be. Previous studies on short-term post-acquisition financial performance in the hospitality industry made arbitrary judgments on time period for normal return computations and the length of the event windows. For the computation of normal/expected returns, previous studies included 100 to 200 trading days ending prior to 12 to 51 days of the acquisition announcements. In addition, they utilized [-1, +1] to [-30, +30] days of event windows. That is 3 to 61 trading days of event windows. In this study, normal or expected returns for both acquiring and acquired companies were estimated using the equation (2) with adjusted daily closing stock prices of 150 trading days, ending 51 days before the M&A announcements [-200, -51] because the public might hint the announcements even prior to the announcements (Kwansa, 1994; Hsu & Jang, 2006). In doing so, S&P 500 composite index is utilized as the return of the market portfolio following Hsu and Jang (2006). Next, abnormal or unexpected returns for each company were computed using the equation (3). Then, the abnormal returns for each event day were averaged across all companies using the equation (4). Finally, the

averaged returns were accumulated for each day over the entire event period to produce CAR using the equation (5). In this study, the event window for measuring each stock's abnormal returns is the common 10 days before and 10 days after the announcements. Thus, the length of the event window is 21 trading days and, from the equation (5),

$CAR = \sum_{t=-10}^{+10} AR_t$. The time line for this study is as follows:



In order to determine whether AR_t was significantly different from zero, a t-test was employed. Prior to conducting the t-test, the aggregate of pre-event standard deviation of abnormal returns across all securities should be computed (Kritzman, 1994). The following equation is the formula for estimating the standard deviation of daily abnormal returns during the estimation period (from -200 days to -51 days):

$$\sigma_{i,pre} = \sqrt{\frac{\sum_{t=-200}^{-51} (AR_t - AR_{pre})^2}{n-1}}, \quad (6)$$

where, $\sigma_{i,pre}$ is the standard deviation of abnormal returns of security i estimated from the pre-event estimation period, AR_{pre} is the average of returns of security i estimated from the estimation period, and n is number of days in the estimation period (i.e., 150 days).

The standard deviations, as formulated above, are aggregated by squaring the standard deviation of each security's return estimated during the estimation period, summing these values across all securities, dividing it by the number of securities, and taking the square root of the value:

$$\sigma_{N,pre} = \sqrt{\frac{\sum_{i=1}^N \sigma_{i,pre}^2}{N}}, \quad (7)$$

where, $\sigma_{N,pre}$ is the aggregate of the pre-event standard deviations of abnormal returns across all securities and N is the number of securities in the sample.

Next, the t-statistics for AR_t are as follows:

$$AR_t \text{ t-stat} = \frac{AR_t}{\sigma_{N,pre}} \quad (8)$$

FINDINGS AND CONCLUSION

Figure 1 represents the AR and CAR for acquiring and target hotel companies. A series of t-tests for the AR did not find any statistical significance for acquiring or target hotel companies, which indicates that acquiring and target hotel companies neither gain nor lose from merger and acquisition announcements. Descriptively, however, the entire acquiring hotel companies generally experienced a little increase in their wealth ($CAR_{+10} = 24.7\%$). When mergers and tender offers are treated separately, it is found that the shareholders of acquiring hotel firms experienced a little more increase in their stock prices in mergers ($CAR_{+10} = 26.5\%$) than in tender offers

($CAR_{-10}^{+10} = -7.4\%$). However, the observations included in this study is largely skewed to merger cases ($n=36$). Thus, it is difficult to make meaningful inference due to the limited number of companies for tender offer cases ($n=2$). Further, the companies were classified into three subsets: cash, stock, and mixed payments. Companies were assigned to cash (or stock) payment when the payment was made with pure cash (or stock). On the other hand, companies were categorized to mixed payment when the payment was not made with pure cash or pure stock. As can be seen in Figure 1, the wealth of acquiring hotels' shareholders increased the most when a mixed payment is made ($CAR_{-10}^{+10} = 55.0\%$). Acquiring hotels with stock payment have a $CAR_{-10}^{+10} = 0.5\%$ and acquiring hotels with cash payment have a $CAR_{-10}^{+10} = 0.0\%$.

For the target hotels, on average, the stock market reacts favorably to the merger and acquisition announcements ($CAR_{-10}^{+10} = 116.9\%$). In particular, tender offers outperformed mergers ($CAR_{-10}^{+10} = 262.6\%$ for tender offers and $CAR_{-10}^{+10} = 64.6\%$ for mergers). When the payment method is considered, it is found that the stock market reacts more favorably to cash payment ($CAR_{-10}^{+10} = 191.7\%$) than stock payment ($CAR_{-10}^{+10} = 102.3\%$) or mixed payment ($CAR_{-10}^{+10} = 56.3\%$).

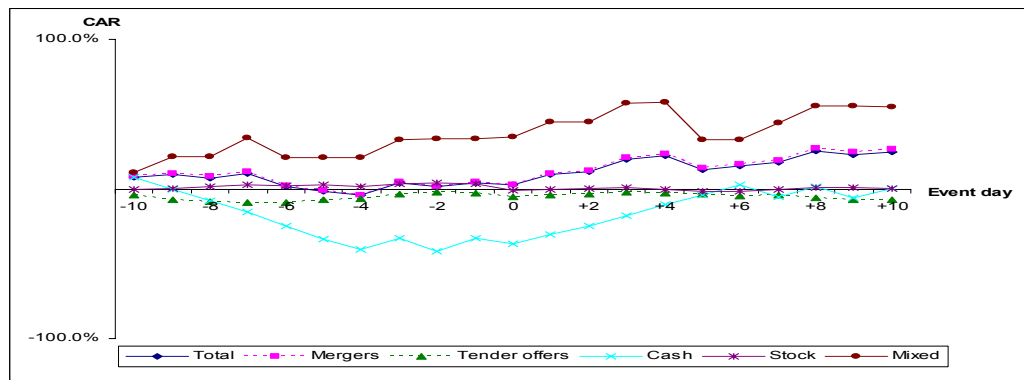
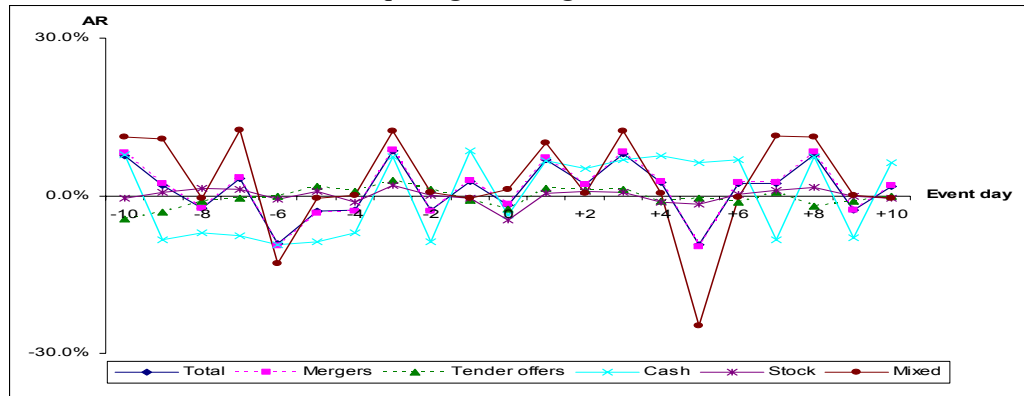
The AR and CAR for acquiring and target restaurants are illustrated in Figure 2. The results of t-tests did not find any statistical significance for AR of acquiring or acquired restaurants. On the other hand, the descriptive statistics indicated small increases in the stock prices of acquiring restaurants ($CAR_{-10}^{+10} = 25.2\%$). Additionally, mergers and tender offers were analyzed separately and the returns were about the same in mergers ($CAR_{-10}^{+10} = 25.1\%$) and in tender offers ($CAR_{-10}^{+10} = 26.1\%$). Descriptive statistics suggest that the wealth of acquiring hotels' shareholders increased the most when a cash payment is made. Acquiring hotels with cash payment have a $CAR_{-10}^{+10} = 85.0\%$ compared to a $CAR_{-10}^{+10} = 21.1\%$ for cash payment. Further, the results showed that the wealth of acquiring hotels' shareholders deteriorated when a mixed payment is made ($CAR_{-10}^{+10} = 85.3\%$).

Overall, the stock market reacted favorably to merger and acquisition announcements for the target restaurants ($CAR_{-10}^{+10} = 140.5\%$). In addition, shareholders of target restaurants gained more with tender offers right after announcements. However, for the whole event window, mergers ($CAR_{-10}^{+10} = 152.7\%$) outperformed tender offers ($CAR_{-10}^{+10} = 118.0\%$). Furthermore, the shareholders of target restaurants gained the most when the deals were cash payment ($CAR_{-10}^{+10} = 168.6\%$). The stock payment had a $CAR_{-10}^{+10} = 150.0\%$ and the mixed payment had a $CAR_{-10}^{+10} = 47.6\%$.

As seen in Figure 1 and 2, the ARs of hospitality firms involved in M&A announcements fluctuate around zero indicating that the shareholders of the firms do not gain returns due to announcements. Accordingly, a series of t-tests did not find any statistical significance. However, descriptive statistics showed that merger and acquisition announcements have a little positive impact on both acquiring and acquired hospitality firms' stock prices even though they are not statistically significant. The results also showed that the shareholders of target companies gained more than those of acquiring companies. When the mode of merger was taken into consideration, it seems that the stock market reacts favorably to tender offers compared to mergers especially for target companies indicating the investors' expectations regarding increased market power and efficiency. In terms of the payment method, the findings showed that the shareholders of hospitality firms generally gained more when cash was used for payment. This phenomenon is partly attributed to the perception of investors that the stock payment signals stock overvaluation, resulting in negative market reactions. The findings of the current study contribute to our body of knowledge about the dynamics of merger and acquisition announcements in the hospitality industry.

Figure 1
AR and CAR for Acquiring and Target Hotels

Acquirers



Targets

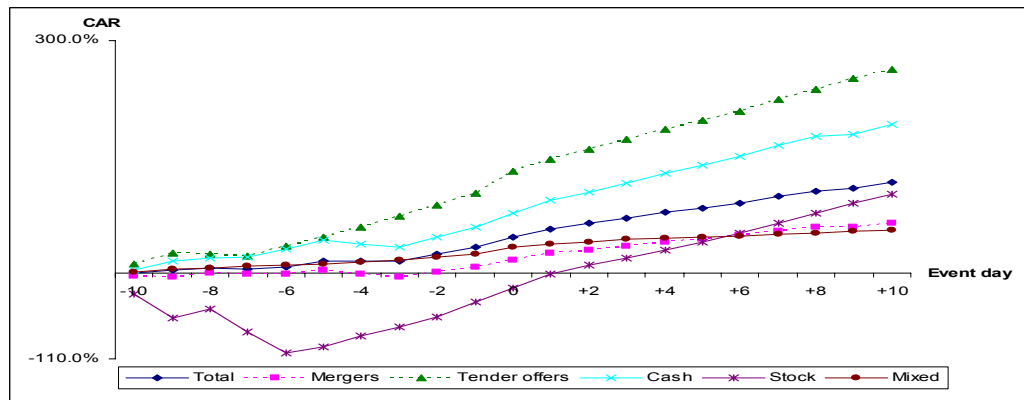
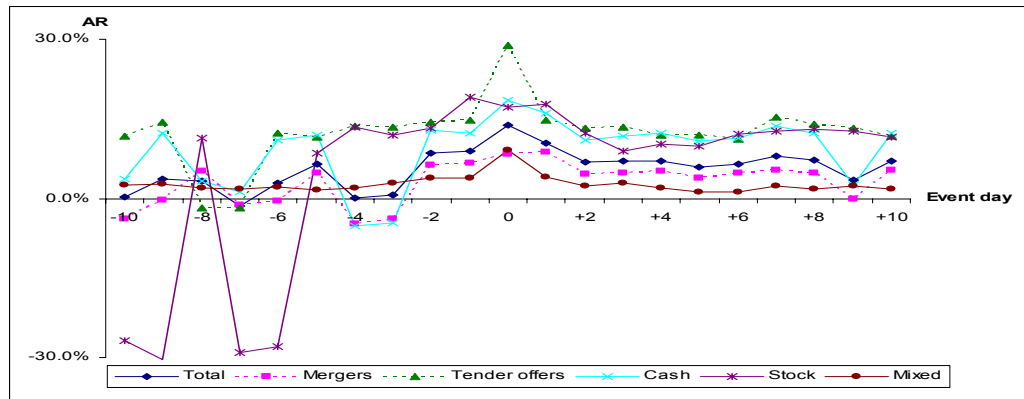
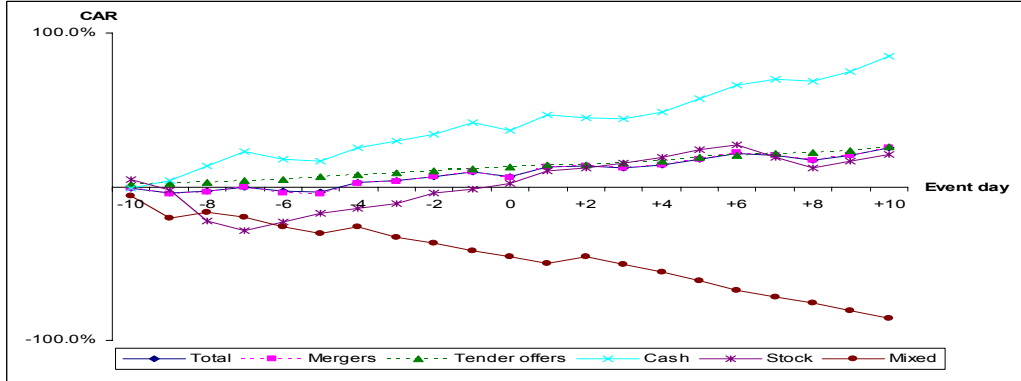
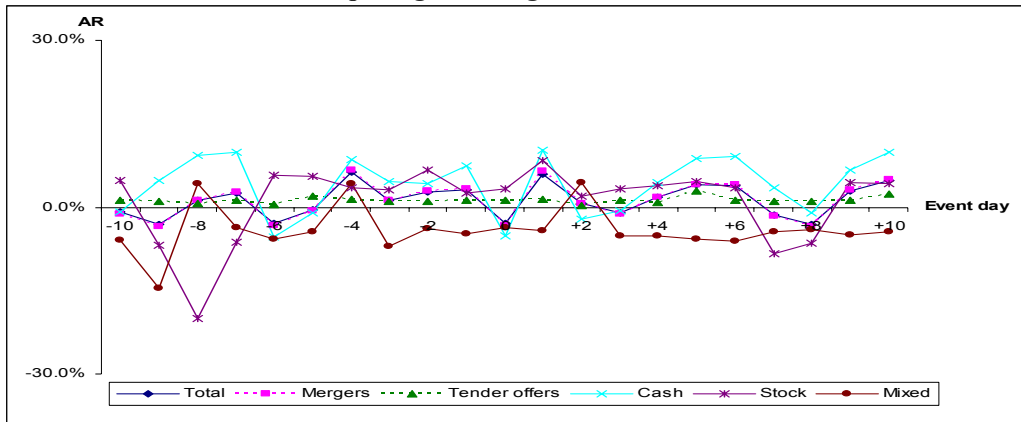
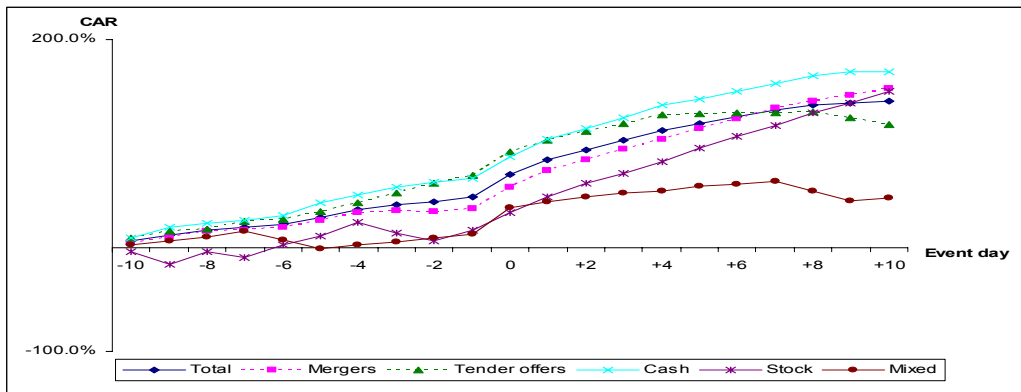
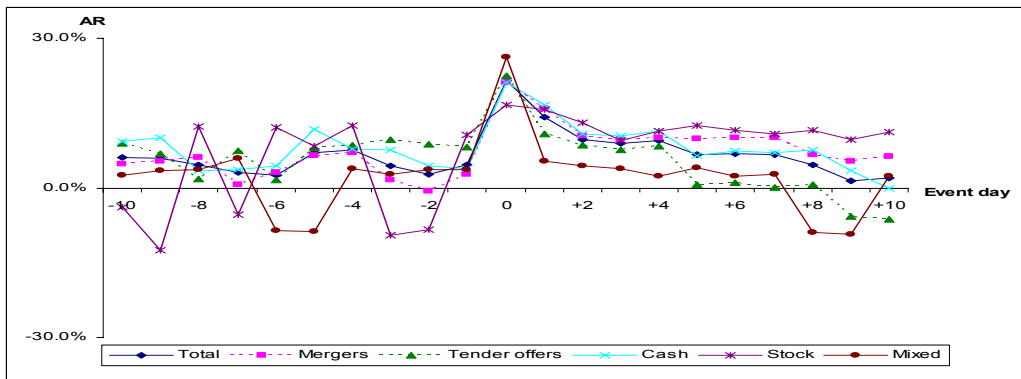


Figure 2
AR and CAR for Acquiring and Target Restaurants

Acquirers



Targets



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BURNOUT AND ENGAGEMENT: A COMPARATIVE ANALYSIS USING PERSONALITY TRAITS

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ABSTRACT

This study focuses on burnout, engagement, and their relationships with personality traits. Results indicate that burnout and engagement may be, rather, two distinctive concepts driven by different personality dimensions. Specifically, the most critical personality trait affecting two core burnout constructs (exhaustion and cynicism) is neuroticism and the most eminent traits predicting four extended engagement factors (vigor, dedication, absorption, and professional efficacy) are conscientiousness and neuroticism. This study does not validate the effects of positive personality traits such as extraversion and agreeableness on burnout and they are found to be weakly related to employees' work engagement as well.

Key Words: burnout, engagement; personality traits

INTRODUCTION

Job engagement scholars perceive job burnout as an erosion of engagement with the job (Schaufeli et al., 2002). Kahn (1990) identifies three psychological conditions related to personal engagement and disengagement: meaningfulness, safety, and availability. Although Kahn uniquely incorporates psychological presence in the complex theoretical model of engagement, these psychological conditions are predominantly connected to the work and social context (e.g., psychological safety means the worker's feeling about whether or not he/she can show and employ him/her self without fear of negative consequences to self image, status, or career during interactions with customers or superiors). He acknowledges the possibility that individual characteristics may influence how workers engage or disengage, given their experiences of psychological meaningfulness, safety, and availability.

Research has shown strong relationships between individual differences (e.g., personality characteristics) and burnout (Piedmont, 1993; Day & Bedeian, 1995; Goddard et al., 2004; De Vries & Van Heck, 2002). If burned-out employees can be characterized by their personality profile, it is reasonable to assume that personality traits can equally predict the level of work engagement by employees. Despite the growing interest about work engagement, studies on employee engagement are limited, particularly regarding the effect of individual differences. To fill this gap, this study uses Kim et al.'s (2007) research paradigm showing the relationship between burnout and personality factors and add the emerging concept of engagement into the model. Specifically, this study is designed to answer the following three questions:

1. Among the Big Five, which personality traits predict engagement?
2. Among the Big Five, which personality traits predict burnout and do the results validate Kim et al.'s (2007) findings?
3. Do the results of personality predictors support the current argument about job engagement as the antithesis of burnout?

LITERATURE

Burnout

Job burnout refers to "prolonged responses to chronic interpersonal stressors on the job" (Maslach, 1998, p.68). According to her, burnout consists of three sub-constructs: emotional exhaustion, depersonalization, and diminished personal accomplishment. Emotional exhaustion refers to a lack of energy and a feeling that one's emotional resources are used up due to excessive psychological demands. Depersonalization is characterized by the treatment of others as objects rather than people through cynical, callous, and uncaring attitudes and behaviors.

Diminished personal accomplishment denotes a tendency to evaluate oneself negatively due to the failure to produce results.

To address a broader set of jobs, Schaufeli et al. (1996) developed the MBI-General Survey (MBI-GS) with three burnout dimensions (exhaustion, cynicism, and reduced professional efficacy), matching the three factors of the original MBI (emotional exhaustion, depersonalization, and diminished personal accomplishment). Exhaustion implies fatigue, which does not necessarily make a direct reference to other people as the source of one's tiredness. Cynicism indicates distancing oneself from one's work and experiencing negative attitude toward one's work in general. Reduced professional efficacy is characterized by low self-efficacy, lack of accomplishment, lack of productivity, and incompetence (Leiter & Maslach, 2001; Schaufeli et al., 2002)

Engagement

The concept of engagement can be traced back to Kahn (1990). He defines personal engagement as "the harnessing of organization members' selves to their work roles" (p.694) and he adds, "in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (p.694). Personal disengagement is defined as "the uncoupling of selves from work roles" (Kahn, 1990, p.694) and "in disengagement, people withdraw and defend themselves physically, cognitively, or emotionally during role performances" (Kahn, 1990, p.694). When workers are engaged, they become physically involved in their tasks, cognitively alert, and emphatically connected to others (Kahn, 1990). However, disengaged employees become physically uninvolved in tasks, cognitively unvigilant, and emotionally disconnected from others (Kahn, 1990).

Kahn (1990) provided a conceptual basis for job engagement, but did not develop an operational definition. Maslach and Leiter (1997) expanded Kahn's (1990) conceptual work. They argued that job engagement is situated at the opposite end of the continuum of job burnout, characterized by energy (rather than exhaustion), involvement (rather than cynicism), and a sense of efficacy (rather than reduced professional efficacy). Therefore, the existing MBI scale can serve as an engagement measure. In their view, low ratings on exhaustion, low scores on cynicism, and high ratings on professional efficacy indicate the state of engagement. Schaufeli et al. (2002) have taken a different approach to engagement. They asserted that although job engagement is the antithesis of job burnout, engagement is the independent state of mind separate from burnout, thereby requiring a different operational definition. Schaufeli and Bakker (2004) defined job engagement as "a positive, fulfilling, work-related state of mind" (p.295) and specified three unique dimensions of engagement: vigor, dedication, and absorption. Accordingly, job engagement is not assessed by the MBI scores but by a set of different measures.

Vigor is characterized by high levels of energy and mental resilience while working, willingness to invest effort in one's work, and persistence even in the face of difficulties. Vigor (high activation) is viewed as the opposite concept of exhaustion (low activation) on the pole of activation (Schaufeli et al., 2002). Dedication refers to a sense of significance, enthusiasm, inspiration, pride, and challenge. Dedication (high identification) and cynicism (low identification) are opposite in terms of identification (Schaufeli et al., 2002). Absorption is characterized by being fully concentrated and deeply engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work. Unlike vigor and dedication that make a direct contrast with the first two burnout components (exhaustion and cynicism), absorption is not the antipode of the last burnout factor of reduced efficacy (Schaufeli & Bakker, 2004). Absorption was discovered during a number of in-depth interviews and not necessarily developed as a contrasting concept of reduced efficacy (Schaufeli et al., 2002).

New Perspectives on Burnout and Engagement

In recent years, arguments have risen that the third dimension of job burnout (personal accomplishment/professional efficacy) may be a separate aspect of burnout and perhaps is more closely related to engagement. For example, Lee and Ashforth (1996) found that personal accomplishment has a different relationship with two other burnout sub-constructs (emotional exhaustion and depersonalization) and other correlates. Specifically, emotional exhaustion and depersonalization were highly interrelated to each other, but these two factors showed weak relationships with personal accomplishment. Emotional exhaustion and depersonalization shared several correlates (e.g., workload, and supervisor support), but personal accomplishment was weakly associated with those correlates.

Schaufeli et al. (2002) conducted confirmatory factor analyses on the measurements of burnout and engagement. Their analyses revealed that a model with two higher-order factors (burnout and engagement) is not a

good fit to data. Instead, the alternative two-factor model, specifying exhaustion and cynicism (core of burnout) loaded on burnout and vigor, dedication, absorption, and professional efficacy (all three engagement scales plus efficacy) loaded on engagement, was superior to the initial model. The result of their study indicates a possibility of professional efficacy as part of job engagement rather than burnout. This new notion of the so-called extended engagement factor (Schaufeli et al., 2002) is well supported by burnout/engagement experts. Therefore, in the present study, we define the concept of burnout using only two burnout sub-dimensions (exhaustion and cynicism) and engagement using four sub-factors (vigor, dedication, absorption, and professional efficacy)

Personality Traits, Burnout and Engagement

Research has shown personality traits as significant predictors of burnout. A large number of studies have focused on the role of negative affectivity or neuroticism on burnout (Spector & O'Connell, 1994; Elliott et al., 1994). Some have reported the relationship between job stress and Type A personality (Ganster, 1986) and psychological hardness (Rush et al., 1995). Recently, the Big Five personality model has received considerable attention in the burnout literature (Piedmont, 1993; Day & Bedeian, 1995; Goddard et al., 2004; De Vries & Van Heck, 2002). The Big Five includes neuroticism, extraversion, agreeableness, conscientiousness, and openness to experience. In the hospitality field, Kim et al.'s (2007) study using the Big Five model is noticeable. Their study results indicate that extraversion is negatively related to exhaustion; agreeableness is negatively related to cynicism; conscientiousness and agreeableness are positively related to professional efficacy (that is, negatively related to reduced professional efficacy); and neuroticism is positively related to exhaustion and cynicism. The authors report that most results concur with previous findings except the agreeableness trait. In general, relationships between agreeableness and job performance and burnout are not found or weak. The authors justify that the reason why agreeableness (characterized by being warm, kind, and empathetic) displays the sizeable influence on cynicism (negative influence) and professional efficacy (positive influence) is that perhaps the respondents of their study are from hotel service jobs typically requiring caring employees who can be sensitive to guests' needs.

Although articles on the relationships between personality traits and occupational stress are abundant, to the authors' knowledge, no studies have been conducted regarding the effect of personality factors on engagement particularly using Big Five. Considering that engagement is the opposite concept of burnout, the relationship between engagement and personality characteristics can be speculated, based on the previous findings reported between burnout and personality traits. For example, Langelan et al. (2006) argue that it is reasonable to predict that neuroticism showing a positive effect on burnout will be negatively related to engagement and extraversion showing a negative influence on burnout will be positively related to engagement.

Extraversion in Big Five reflects individual traits such as being sociable, gregarious, assertive, talkative, and active. It is known that extraversion predicts performance in sales occupations requiring high levels of energy and social skills (Barrick & Mount, 1991). One critical component of engagement is vigor (high energy). It also intuitively makes sense to expect a positive relationship between extraversion and job engagement as both concepts share the characteristic of high energy. Another personality dimension (among Big Five) that is likely to be associated with engagement is conscientiousness. Conscientiousness reflects individuals' dependability and volition, which has been the most important factor in predicting job performance across all occupations (Barrick & Mount, 1991). Individuals with high conscientiousness tend to have a high achievement-striving motivation. The common characteristic of three sub-factors of engagement (vigor, dedication, and absorption) describes internal drive to achieve a certain goal. Therefore, conscientiousness is expected to affect job engagement through the internal motivational process.

In summary, in this study, the hypotheses regarding burnout and Big Five are mainly based on Kim et al.'s (2007) findings. Hence, it is hypothesized that extraversion and agreeableness are negatively related to burnout and neuroticism is positively related to burnout. Note that in the present study, burnout is defined as the combination of exhaustion and neuroticism and engagement as the combination of vigor, dedication, absorption and professional efficacy (original three engagement sub-factors plus efficacy). Among Big Five, it is suspected that extraversion and conscientiousness are largely related to job engagement and, to a lesser degree, to neuroticism. Openness to experience (characterized by intelligence, creativity, and breadth of interest) is known as a predictor of training proficiency but not a predictor of job proficiency (Barrick & Mount, 1991); therefore, the openness to experience dimension is not expected to have relationships with either job burnout or engagement. Accordingly, the following hypotheses are proposed:

- Hypothesis 1a: Extraversion is negatively related to burnout.
Hypothesis 1b: Extraversion is positively related to engagement.
Hypothesis 2: Agreeableness is negatively related to burnout.
Hypothesis 3: Conscientiousness is positively related to engagement.
Hypothesis 4a: Neuroticism is positively related to burnout.
Hypothesis 4b: Neuroticism is negatively related to engagement.

METHOD

Procedure and Participants

Fifty-one Subway stores, located in the northwest, U.S., participated in this study. Participating store managers were responsible for distribution and collection of the questionnaires. In the cover letter of each survey, we introduced the purpose of the study and guaranteed confidentiality of the information. Out of 510 surveys, 187 usable questionnaires were returned (response rate: 37%). 125 females (67%) and 62 males (33%) participated in this study. The majority of subjects ($n=147$, 79%) were single. The subjects' ages ranged from 16 years to 57 years with a mean of 22 years. Twenty-six respondents (14%) had not completed high school; fifty-one respondents (27%) were high school graduates; slightly more than half of the participants ($n=78$, 59%) indicated they have some college education or associate degree; and the remaining respondents ($n=14$, 8%) had Bachelor's or graduate degrees. Overall, the low educational level seemed to reflect the characteristic of the workforce of the quick-service restaurant segment in the U.S. The length of employment ranged from a minimum of one month to a maximum of 13 years, with an average of one year and 7 months. The majority of respondents ($n=116$, 62%) were co-workers; thirty-seven respondents ($n=37$, 20%) were supervisors; and the remaining participants ($n=31$, 17%) were either assistant managers or managers.

Measures

Job burnout was assessed with the Maslach Burnout Inventory-General Survey (MBI-GS; Schaufeli et al., 1996). MBI-GS includes three sub-constructs: exhaustion (five items, $\alpha = .86$), cynicism (five items, $\alpha = .80$), and professional efficacy (six items, $\alpha = .69$). All items were rated on a 5-point Likert-type scale ranging from 1=strongly disagree to 5=strongly agree. In this study, professional efficacy is used as an element of work engagement (for justification, see the literature section). Job engagement was measured with the Utrecht Work Engagement Scale (UWES; Schaufeli et al., 2002). The instrument is composed of three sub-constructs: vigor (six items, $\alpha = .73$), dedication (five items, $\alpha = .87$), and absorption (six items, $\alpha = .74$). All statements were rated on a 5-point Likert-type scale ranging from 1=strongly disagree to 5=strongly agree. The Big Five personality factors were assessed with the International Personality Item Pool (IPIP; Goldberg, 2001). Cronbach's alpha values for extraversion, agreeableness, neuroticism, conscientiousness, and openness to experience were .86, .81, .85, .77, and .80, respectively. All responses were made on a 5-point scale ranging from 1=very inaccurate to 5=very accurate.

For control variables, two job-related factors were considered. First, stressful social interactions with customers are often regarded as one of the major job stressors in the hospitality work setting. Therefore, customer verbal aggression (Dormann & Zapf, 2004) was selected as a representative job demand variable in this study. The instrument includes five items ($\alpha = .82$) that refer to customer quarrels, customer criticisms, and verbal aggression. Items were rated on a 5-point scale ranging from 1=not at all true to 5=absolutely true. Second, skill variety (Hackman & Oldham, 1975) was chosen as a resource variable for this study. Cronbach's alpha for the scale with three items (Hackman & Oldham, 1975) was .83. All answers were made on a 5-point scale ranging from 1=strongly disagree to 5=strongly agree. Lastly, respondents were asked to provide some demographic information. Demographic attributes such as sex, age, marital status, education, the length of employment, job position, and the total restaurant work experience were inquired in the final section of the questionnaire.

RESULTS

Demographic Characteristics and Burnout/Engagement

A series of ANOVAs were performed to detect the effects of demographical characteristics (sex, age, marital status, education, position, and work experience) on burnout (exhaustion and neuroticism) and the extended engagement factors (vigor, dedication, absorption, and professional efficacy). Out of six demographic variables, only one variable (job position) demonstrated a significant association with engagement ($p < .05$) and none of them were related to burnout. Specifically, managers, assistant managers, and supervisors (group 2: supervisory position)

displayed significantly higher ratings than co-workers (group 1: non-supervisory position) on all extended engagement sub-dimensions (vigor, dedication, absorption, and professional efficacy). The effect of job position on engagement is in line with Schaufeli and Bakker's (2003) finding (i.e., high ranking officials such as managers and executives are more engaged). Because of the significant ANOVA result, job position was included as one of the control variables in hierarchical regression analyses of this study.

Hypotheses Testing

To test the proposed hypotheses, hierarchical regression analyses were carried out with burnout and engagement as two outcome variables. Burnout is the composite score obtained by averaging exhaustion and cynicism and engagement is the composite score obtained by averaging vigor, dedication, absorption, and professional efficacy. In the first step, three control variables entered the regression equation: job position, customer aggression (job demand), and skill variety (job resource). After controlling for the effects of three job-related variables, the Big Five personality dimensions entered the regression as the second set of predictor variables (step 2). The regression results predicting burnout and engagement are shown in Table 1.

Table 1
Regression Results Predicting Job Burnout And Job Engagement

Independent variables	Dependent variables					
	Burnout ^a			Engagement ^b		
	β'	β'	ΔR^2	β'	β'	ΔR^2
I: Control variables			0.21**			0.54**
Job position c	0.11	0.09		0.21**	0.22**	
Skill variety	- 0.39**	- 0.40**		0.66**	0.62**	
Customer aggression	0.24**	- 0.06		- 0.02	0.03	
II: Personality			0.14**			0.08**
Extraversion		- 0.11			0.03	
Agreeableness		- 0.10			0.11	
Conscientiousness		- 0.03			0.18**	
Neuroticism		0.35**			- 0.14*	
Openness		0.13			- 0.08	
F		7.44**			22.66**	
Total R ²		0.35			0.62	
Adjusted R ²		0.31			0.60	

Note: β' = Standardized beta coefficients without Big Five variables; β' = Final beta (standardized) coefficient after all variables have been entered. ^a Burnout is the composite score obtained by averaging exhaustion and cynicism.

^b Engagement is the composite score obtained by averaging vigor, dedication, absorption, and professional efficacy.

^c For job position, 1= non supervisory position 2=supervisory position. * $p < .05$; ** $p < .01$

For burnout, the control variables (position, skill variety, and customer verbal aggression) explained 21% of the variance. In the first equation, skill variety and customer verbal aggression were significant predictors. Skill variety showed a negative relationship ($\beta = -.39, p < .01$) and verbal aggression had a positive relationship ($\beta = .24, p < .01$) with burnout. The entry of Big Five contributed unique variance to the equation ($\Delta R^2 = .14, p < .01$). Among five personality traits, only neuroticism had a significant (positive) beta coefficient ($\beta = .35, p < .01$). In the final (second) equation with control variables and Big Five, the effect of customer verbal aggression became insignificant; therefore skill variety ($\beta = -.40, p < .01$) and neuroticism were two significant predictors of burnout.

For engagement, the control variables (position, skill variety, and customer verbal aggression) explained 54% of the variance. In the first equation, position ($\beta = .21, p < .01$) and skill variety ($\beta = .66, p < .01$) predicted engagement. The entry of Big Five added 8% of the variance to the regression model ($\Delta R^2 = .08, p < .01$). Two personality factors (conscientiousness and neuroticism) were significantly related to engagement in opposite directions: Conscientiousness had a positive beta coefficient ($\beta = .18, p < .01$) and neuroticism had a negative beta coefficient ($\beta = -.14, p < .05$). In the final (second) equation with control variables and Big Five, position ($\beta = .22$,

$p < .01$) and skill variety ($\beta = .62, p < .01$) remain significant; therefore, there were four predictors of engagement (position, skill variety, conscientiousness and neuroticism) in the model.

Based on the above analyses, each hypothesis is tested. Hypothesis 1a (negative effect of extraversion on burnout) and Hypothesis 1b (positive effect of extraversion on engagement) are rejected because extraversion did not show any significant relationships with either burnout or engagement. Hypothesis 2 is also rejected because agreeableness was not significantly related to burnout. Hypothesis 3 predicting the positive effect of conscientiousness on engagement is supported. The last two hypotheses concerning the positive effect of neuroticism on burnout (Hypothesis 4a) and negative effect of neuroticism on engagement (Hypothesis 4b) are supported.

Further Analyses on Relationships between Personality Traits and Burnout/Engagement

One of the purposes of this study was to validate Kim et al.'s (2007) findings on burnout and Big Five personality dimensions. Because the results of their study were based on each burnout component as an outcome variable, further regression analyses were conducted treating exhaustion and cynicism as separate dependent variables (Table 2). Despite separation, the effects of extraversion and agreeableness on burnout (exhaustion and cynicism) did not appear at the 0.05 significance level. Kim et al. reported a significant relationship between exhaustion and extraversion and between cynicism and agreeableness. In the present study, only neuroticism is found to be a significant determinant of burnout: exhaustion ($\beta = .38, p < .01$) and cynicism ($\beta = .24, p < .05$). In the study by Kim et al., the neuroticism personality trait displayed the largest beta coefficient with both exhaustion and cynicism, suggesting the strongest effect on burnout among all traits. Although the effects of two positive personality dimensions (extraversion and agreeableness) are not validated, the results of this study are in harmony with Kim et al.'s finding by showing neuroticism as the most influential burnout predictor.

Table 2
Regression Results Predicting Exhaustion And Cynicism

Independent variables	Dependent variables			
	Exhaustion		Cynicism	
	β	ΔR^2	β	ΔR^2
I: Control variables		0.12**		0.26**
Job position ^a	0.10		0.03	
Skill variety	- 0.31**		- 0.43**	
Customer aggression ^b	0.03		0.09	
II: Personality		0.13**		0.11**
Extraversion	- 0.08		- 0.14	
Agreeableness	- 0.02		- 0.15	
Conscientiousness	0.01		- 0.06	
Neuroticism	0.38**		0.24*	
Openness	0.05		0.11	
<i>F</i>	4.69**		8.27**	
Total R^2	0.25		0.37	
Adjusted R^2	0.20		0.32	

Note: β = Standardized beta weight. ^a For job position, 1= non supervisory position 2= supervisory position

^b The effects of customer verbal aggression on exhaustion ($\beta = .20, p < .05$) and cynicism ($\beta = .23, p < .01$) were significant prior to the entry of Big Five personality variables. * $p < .05$; ** $p < .01$

Another purpose of this study is to find the personality traits pertaining to job engagement. It is clear that conscientiousness is the most dominant personality trait influencing engagement (Table 1). Further hierarchical regression analyses using four sub-dimensions of the extended engagement factor (vigor, dedication, absorption, and professional efficacy) as separate dependent variables were also conducted (Table 3). The further analyses reinforced the compelling effect of conscientiousness on engagement by demonstrating that conscientiousness is positively related to most of the engagement sub-dimensions: vigor ($\beta = .24, p < .01$), absorption ($\beta = .22, p < .05$) and

professional efficacy ($\beta = .21, p < .01$). Taken all together, it may be concluded that employees high in conscientiousness, characterized by strong responsibility, organizational skills, and steadiness, are more likely to drive their energy into work, complete the job, and ultimately feel a strong sense of professional efficacy.

It is quite surprising to observe no relationship between extraversion and engagement (Table 1). Initially, it was predicted that extraversion would have a positive effect on engagement because of the high energy level that extraverted individuals have. Instead, a significant negative relationship was found between neuroticism and engagement (Table 1). The further analyses (Table 3) reveal that employees high in neuroticism have a significantly low score on vigor ($\beta = -.27, p < .01$) and the lack of vigor (energy) contributes to employees' disengagement at work. Overall, the results of the present study appear to downgrade the effect of extraversion and highlight the effect of neuroticism in their relations to burnout and engagement.

Next, although agreeableness was not a significant predictor of engagement (Table 1), in the further analyses (Table 3), this personality trait displayed a significant, positive relationship with one of the extended engagement dimensions, i.e., professional efficacy. Kim et al. (2007) argued that for hospitality jobs, agreeableness is as critical as extraversion (generally, the effect of extraversion is better known to burnout scholars in other disciplines) because agreeableness is negatively related to cynicism and positively related to professional efficacy. This study, although weakly, supports Kim et al.'s argument about the significant role of agreeableness in hospitality jobs by reproducing the result that agreeable employees (characterized by being warm, friendly, kind, and empathetic) may feel a stronger sense of efficacy at work.

Lastly, as for job demand and resource variables, skill variety (resource) had a negative relationship with burnout and customer verbal aggression (demand) had a positive relationship with burnout, while skill variety (resource) positively affected engagement and verbal aggression (demand) showed no influence on engagement (Table 1). These results confirm the previous findings that burnout is affected by both demands and resources (in opposite directions) whereas engagement is exclusively predicted by available job resources (Schaufeli & Bakker, 2004).

Table 3
Regression Results Predicting Vigor, Dedication, Absorption And Professional Efficacy

Independent variables	Dependent variables							
	Vigor		Dedication		Absorption		Prof. efficacy ^a	
	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
I: Control variables		0.20**		0.49**		0.36**		0.29**
Job position ^a	0.21**		0.13		0.17*		0.20**	
Skill variety	0.33**		0.65**		0.48**		0.41**	
Aggression	0.11		0.05		- 0.01		0.03	
II: Personality		0.19**		0.02		0.07*		0.12*
Extraversion	0.10		- 0.05		0.04		0.07	
Agreeableness	0.08		0.14		0.10		0.17*	
Conscientiousness	0.24**		0.01		0.22**		0.21**	
Neuroticism	- 0.27**		- 0.07		- 0.04		- 0.10	
Openness	- 0.02		- 0.10		- 0.11		0.00	
F	9.43**		14.92**		11.20**		9.98**	
Total R ²	0.39		0.51		0.43		0.41	
Adjusted R ²	0.35		0.48		0.40		0.37	

Note: β = Standardized beta weight. ^a For job position, 1 = non supervisory position 2 = supervisory position

* $p < .05$; ** $p < .01$

CONCLUSIONS

The present study makes a noteworthy contribution to the engagement literature by demonstrating the role of individual differences particularly, personality dimensions, in employees' work engagement. Although burnout

and engagement are commonly viewed as opposite constructs located on the same continuum, the results of this study indicate they are, rather, two distinctive concepts driven by different personality traits. Overall, the most critical personality trait affecting burnout is neuroticism and the most eminent trait predicting engagement is conscientiousness. The effects of extraversion and agreeableness are very weak in this study despite many feasible theories supporting their relationships with burnout and engagement. Therefore, the continued research is recommended to find the concrete relationship between these personality dimensions and burnout and engagement. It is desirable to conduct the future research using a bigger sample with a mixture of hospitality segments (e.g., travel, gaming, lodging, and food service) because the small effect is often detected in larger samples and the results can be better generalized by involving a variety of industries.

Although it is not a central point of this study, it is worth noting the magnitude of the effect of skill variety (job resource) on burnout and engagement (Table 1). In fact, skill variety was the most significant determinant of both burnout and engagement among all independent variables including personality dimensions. Organizations may not have much control over situational factors such as customer verbal aggression, but they do control the skills their employees can learn. According to the results, offering employees multiple opportunities to be involved in various tasks and/or projects is likely to reduce their feeling of burnout and simultaneously increase the level of engagement at work. Considering the participants of this study are quick-service restaurant workers, the result of this study may also indicate that skill variety is particularly important in the work environment where tasks are simple and routine.

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A THEORETICAL MODEL OF THE LOCAL PARTICIPATION IN ECOTOURISM

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ABSTRACT

For sustainable development, ecotourism requires local participation from planning through implementation in the local area. This study aimed to investigate the influence of ecotourism impacts (economic gains, equity of income distribution, and social impacts) on local participation (in decision-making and nature conservation) in ecotourism. For the purpose of this study, a theoretical model was proposed and tested. The results showed that economic gains and equity of income distribution have significant influences on local participation in decision-making. Further, local participation in nature conservation was significantly influenced by economic impacts and local participation in decision-making.

Key Words: ecotourism, tourism impacts, local participation, decision-making, nature conservation

INTRODUCTION

The ultimate goal of ecotourism is to provide quality living standards to local communities and natural conservation of the region. For the sustainable development of ecotourism, local participation has been emphasized to include all stages of development, from planning to implementation of the ecotourism project in the region (Scheyvens, 1999; Timothy, 1999). There are two reasons why local participation has been emphasized in ecotourism development. First, it is the local people who are directly influenced by the consequences of poorly planned and implemented tourism (Scheyvens, 2003). Second, if ecotourism is not supported by the local community, it can be exploited in less sustainable ways or even destroyed by the local people. Inevitably, ecotourism impacts the local community in several ways. For example, increases in household income or employment opportunities are positive economic impacts that are generated by ecotourism development in the local area (Beeton, 1998). In addition, water supply systems, health clinics, and shopping opportunities are examples of positive social impacts (Jurowski, Uysal, & Williams, 1997; Scheyvens, 2003). Of course, ecotourism does not always bring positive impacts to the community. Like other forms of tourism, traffic congestion, crime, and an increased cost of living are some negative impacts of ecotourism development. Tourism impacts are most obvious at the level of the local community (Timothy, 1999). Because ecotourism is generally initiated in less developed or even pristine places, the local residents are likely to be more vulnerable to tourism impacts. If residents perceive excessively negative impacts from ecotourism, their resistance cannot be avoided. On the other hand, when residents positively perceive tourism impacts, they are empowered to participate in tourism (Scheyvens, 2003). Therefore, in this study, we argued that positive ecotourism impacts would influence local participation in ecotourism development.

Local participation in the tourism project can be viewed in three ways: (1) participation in decision-making; (2) conservation of resources in the region; and (3) involvement in the benefits of tourism development (Scheyvens, 2003; Timothy, 1999). Local participation in decision-making enables local residents to determine their own goals and consult with other stakeholders about tourism concerns (Timothy, 1999). Participation in nature conservation is needed for balancing development and conservation in the area. Conserving natural resources is the foundation of ecotourism (Drake, 1991) and it is, indeed, the very goal of developing an area of ecotourism. Lastly, involvement in the benefits of tourism development implies that local residents received socioeconomic benefits from the project.

Positive tourism impacts such as increased incomes and employment are examples of benefits for local residents (Timothy, 1999). Considering that (1) benefits of tourism development are delivered in the form of tourism impacts to local residents and (2) tourism impacts are influential on local participation, it is expected that local participation in decision-making and nature conservation are influenced by ecotourism impacts. Therefore, this study focuses on local participation in decision-making and nature conservation. While there has been significant qualitative research on tourism impacts and local participation in ecotourism on a case-by-case basis, little research has tried to test a theoretical model for local participation in ecotourism. This study aims to address this gap in previous research. Thus, the purpose of the current study is to build and test a theoretical model of local participation in ecotourism in relation to ecotourism impacts on local community.

LITERATURE REVIEW

Ecotourism

Ecotourism can be defined as “an activity where the authorities, the tourism industry, tourists, and local people cooperate to make it possible for tourists to travel to genuine areas in order to admire, study, and enjoy nature and culture in a way that does not exploit the resource, but contributes to sustainable development” (Bjork, 2000. p. 196-197). Sustainable development involves *meeting needs of the present generation without compromising the needs of future generations* (Telfer, 2003). Based on the definitions of ecotourism, several important aspects of ecotourism must be explained. First, ecotourism is designed to provide tourists with experiences to *admire, study, and enjoy nature and culture* in an undisturbed region (Bjork, 2000; Ceballos-Lascurain, 1991). Ecotourists are engaged in activities that promote their understanding of environmental and cultural resources in the particular region and provide economic gains to local community. Tourists’ behaviors are expected to be non-consumptive and non-degrading to the local community (Hvenegaard, 1994), yet benefit the local economy and conservation (Bjork, 2000). Tourists’ influences on the community should be minimized related to the environmental and cultural and be maximized related to economics. In addition, tourists’ satisfaction with the experience should be maximized (Grenier, Kae, Miller, & Mobley, 1993). More importantly, ecotourism is meant to provide a balance between sustainable development and the conservation of resources to the local community (Scheyvens, 1999; Wallace & Pierce, 1996). As a sustainable tourism, ecotourism should contribute to the local community’s long-term economic benefits, which eventually become a means to conserve the environment and culture with respect to what they have. Economic, social, and environmental benefits should be maximized, while costs for people and environment should be minimized (Boo, 1991). The scope and scale of ecotourism must be determined with regard to the community’s environmental, cultural, and social fragility (Bjork, 2000). Ecotourism involves four major players: (1) the authorities; (2) the tourism industry; (3) tourists; and (4) local residents (Bjork, 2000). These four players must collaborate closely with each other to achieve the goals of ecotourism (Timothy & Tosun, 2003). Considering ecotourism usually takes place in less-developed places, cooperation among stakeholders is not easy to detect when planning and implementing ecotourism in the area. While scholars have underscored the importance of local participation in ecotourism development, in the less-developed regions, where most ecotourism projects are implemented, local participation in the planning process is usually very limited or restricted (Timothy, 1999). Without local participation and actual voices contributing to the development process, we cannot insure that ecotourism is beneficial to the local community. It must be considered that local people, those who actually live in areas targeted for ecotourism, built their lives embracing their own culture and surrounding environment. In general, local people have more knowledge on some issues related to their environment, which other stakeholders cannot easily understand. Further, local knowledge can help find the right direction for ecotourism to develop in the area. Finally, locals are actually the part of the ecotourism product (Murphy, 1985. p. 153) and their well-being and improvement is one goal of ecotourism. Sustainable development is only possible when local people manage their resources and enjoy direct benefits from it (Carter, 1993).

The impacts of ecotourism development in a local community

Inevitably, ecotourism provides several impacts on the local community. Among them, positive economic and social impacts are two dominant components that increase local support for nature-based tourism (Jurowski et al., 1997). Ecotourism needs to consider the economic and social development of the local community in its planning.

Economic impacts

Economic gains

As a labor-intensive industry, ecotourism provides employment, business opportunities, and diversified income sources (direct/indirect) to the community (Beeton, 1998; Ioannides, 2003). To be successful, ecotourism must contribute to local economic development. Ecotourists who spend money in the region for accommodation, food, souvenirs, and other activities generate increased income and employment opportunities. In fact, economic gains are the most obvious impact that provides locals with benefits from tourism (Scheyvens, 2003; Timothy, 1999). Residents who receive economic benefits should therefore perceive the tourism impacts more positively and support the tourism (Jurowski et al., 1997). To increase local participation, the local community needs to receive economic benefits from the ecotourism. If immediate survival is a priority concern of the local community, their participation in establishing long-term goals and reflecting their opinions in the process is too ideal and difficult to achieve (Timothy, 1999). Timothy and Tosun (2003) argued that poverty is a hindrance that keeps people from participating in the decision-making process. The authors thus declared economic stability as a facilitator for local participation in decision-making. Therefore, it is deduced that:

H1: Economic gains are positively related to participation in decision-making.

The success of ecotourism is fundamentally related to the existence of the natural resources of the region (Ryel & Grasse, 1991). Nature conservation is hard to achieve without the support of local residents, who rely on the natural resources for their livelihood (Boo, 1991). Often local residents are prevented from conducting their traditional activities related to living because land is designated as a specific reserve (Carter, 1993). Degradation of nature is therefore possible by resentful residents with the forms of random mining, logging, or poaching animals. Previous research argued that economic gains are ultimately related to natural conservation (Boo, 1991; Ryel & Grasse, 1991). The economic benefits from ecotourism development need to be invested into nature conservation as well as an improved quality of living. Local people who directly benefit from ecotourism understand that their income comes from the natural resources. This realization increases their support to protect these natural resources. Economic gains not only encourage local people to avoid participating in any degrading activities of their own, but also to conserve their resources from actions that cause environmental threats from others (Wunder, 2000). Therefore, it is hypothesized that:

H2: Economic gains are positively related to participation in nature conservation.

Equity of income distribution

Obviously, ecotourism brings more economic inflow to the local community. However, more important is the equity of income distribution (Scheyvens, 2003; Wilkinson & Pratiwi, 1995). Equity can be realized when the benefits and costs of ecotourism development are spread as far as possible in communities (Timothy, 1999). In less-developed countries, tourism development usually depends on foreign investors with more skills and money as well as a few elites in the community. Thus, the income usually concentrates on these limited people (Scheyvens, 1999; Wilkinson & Pratiwi, 1995). Sustainability cannot be achieved if economic gains only increase the plight of poor people and hinder their accessibility to use the resources for their living (Barkin, 2003). The economic gains, therefore, should benefit the whole community. When inequity of income distribution occurs, people are disempowered economically and socially, thus generating jealousy and hostility, resulting in disagreements in ecotourism decision-making (Scheyvens, 1999). As mentioned, equity of income distribution is directly related to empowerment. People become disempowered when only a small number of people receive direct economic benefits, while other community members do not share these benefits due to their lack of resources (Scheyvens, 1999). On the other hand, if the economic benefits are shared equitably with community members, local people become empowered to participate in the ecotourism decision-making process. That is, if local people perceive that economic gains from development benefit the whole community and not just a few people, they are more likely to participate in decision-making so that their wants and needs can be well-reflected in planning and implementation. Therefore, it is hypothesized that:

H3: Equity of income distribution is positively related to participation in decision-making.

Social impacts

Ecotourism should contribute not only to the economic benefits of the area, but also to the quality of living standards of the local community (Carter, 1993). Apparently, economic growth is the most direct and noticeable impact of ecotourism in the local area. However, social impacts should not be underestimated. In fact, emphasis on economic development only sometimes causes social and cultural problems, which eventually results in weakening

the quality of life (Wilkinson & Pratiwi, 1995). For example, Wilkinson and Pratiwi (1995) found that as the direction of tourism development shifts “up scale,” local people, especially the poor, are faced with the possibility of being displaced from their homes. Well-planned development, however, has a positive impact on the well-being of local community. The local community can be socially empowered when profits from ecotourism are used to support social development projects (Scheyvens, 1999). Improvements in the water supply system, transportation, power supply, and health clinics are some examples of social changes that influence social empowerment. If ecotourism has positive social impacts on the local community, local awareness of natural conservation will be increased. This is because the improved way of life results from the uniqueness of the natural resources, which enables ecotourism in the first place. Nature and the environment should be protected for their long-term well-being. Wunder (2000) also argued that positive social changes encourage local people to conserve their natural resources. Therefore, it is deduced that:

H4. Social impacts are positively related to participation in nature conservation.

Local participation in decision-making

The importance of local participation for ecotourism to succeed has been emphasized by several scholars (Bjork, 2000; Boo, 1991; Drake, 1991; Funnell, 2003; Jurowski et al., 1997; Scheyvens, 1999; Timothy, 1999; Timothy & White, 1999). Local participation can be defined as “the ability of local communities to influence the outcome of development projects such as ecotourism that have an impact on them” (Drake, 1991, p. 132). Local participation has also been underscored as “prerequisite to sustainability” (Woodley, 1993, p. 137) and a requirement for local control over the ecotourism project. Local participation in the decision-making process empowers local people to determine their own goals for development and pursue tourism to the level that local needs are fulfilled (Timothy, 1999). It also provides locals with opportunities to more deeply understand and express their opinions on the project. Their opinions make knowledge and experiences available to the planning process (Timothy, 2002). Furthermore, local participation in decision-making gives opportunities to other stakeholders, especially those who are driving the development, to understand locals’ perspectives on ecotourism development. Although local participation is not a panacea to the problems derived by ecotourism (Drake, 1991), without local support, a sustainable ecotourism project cannot be accomplished. Drake (1991) emphasized there are three specific advantages to integrating local participation in ecotourism: (1) it helps managers to reduce potential conflict with the local community; (2) it provides more opportunities to achieve better decision-making with a wider range of alternatives obtained from open discussions; and (3) it legitimates the decision-making process through the local input.

Local participation in nature conservation

For sustainable tourism development, tourists should not have a detrimental impact on the environment. Developers need to ethically or morally consider the impacts on the environment in their actions, while not only focusing only on economic gains. Conservation is also delivered by local people’s endeavors, however. It is critical that local people remain responsible for their livelihood environment. They may take their environment for granted. The conservation of natural resources in the region, however, is indeed largely dependent on local people (Ryel & Grasse, 1991). It seems reasonable to expect, therefore, that participation in decision-making encourages local people to appreciate their environment and to conserve it. They understand that ecotourism can be successfully initiated in their region because of their unique culture and environment. As they realize that their livelihood depends on conserving the environment, they will naturally support sustainable activities for their environment. Timothy (2001) insisted that resident involvement in planning motivates local people to preserve their environment from disrespectful tourists. Carter (1993) also supported that when locals are actively engaged in the project, they remarkably reduce destructive behaviors to environment such as randomly cutting trees and poaching animals. Therefore, for this study, we deduce that the more local residents participate in the decision-making process, the more they are willing to participate in conserving natural resources. Therefore, it is deduced that:

H5. Local participation in decision-making is positively related to participation in nature conservation.

METHODOLOGY

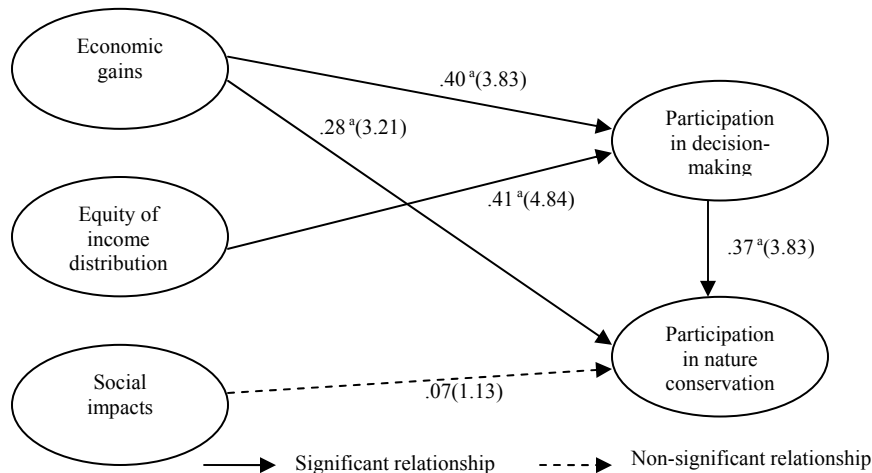
A questionnaire survey was designed and administrated in this study. Eleven items were used to measure the intended constructs. For “economic gains” construct, two items were used: (1) increased income and (2) employment opportunities. A five-point Likert-type scale was used from 1 (decreased greatly) to 5 (increased greatly). For “equity of income distribution,” one item was used: equity of income distribution. A five-point Likert-type scale was used from 1 (greatly different) to 5 (no different). For “social impacts,” four items were adopted: (1)

transportation, (2) water supply, (3) power supply, and (4) safety. A five-point Likert-type scale was used from 1 (greatly deteriorated) to 5 (greatly improved). For “participation in decision-making,” two items were used: (1) intention to propose advice and (2) suggestions and intention to participate in ecotourism development. For “participation in nature conservation,” two items were used: (1) intention to improve nature conservation and (2) improvement of environmental protection awareness. A five-point Likert-type scale was used from 1 (definitely will not) to 5 (definitely will). The target population of this study was local residents in three communities, Shangwang Cun, Tongguan Zhai, and Liang Cun, near the Taibai Nature Reserve in Shaanxi Province, China. The survey was conducted in 2004. A total of 250 questionnaires were distributed and 211 were obtained. After data screening, 183 usable questionnaires were used for further data analysis, representing a valid response rate of 73.2%. Structural equation modeling (SEM) technique using LISREL 8.8 was conducted to test the model.

RESULTS

The overall measurement quality was assessed using a confirmatory factor analysis (CFA). Initial analyses suggested that one item among social impacts (transportation) should be dropped for further analyses. The overall model fit statistics for the CFA are acceptable ($\chi^2 = 87.92$, $df = 26$, $p < .01$, $GFI = .92$, $CFI = .90$, $RMSEA = .11$, $SRMR = .062$). All indicators had statistically significant loadings on their latent constructs, and each of the measures exhibited good composite reliability, from a low of .63 for participation in decision-making items to a high of .83 for participation in nature conservation items. In addition, the average variance extracted (AVE) for each latent variable exceeded the squared correlation between the variables, indicating discriminant validity. Structural equation modeling using LISREL 8.8 was used to test the proposed model. As shown in Figure 1, “economic gains” has a significant influence on “participation in decision-making” ($H1$, $\gamma_{11} = .40$, $t\text{-value} = 3.83$) and on “participation in nature conservation” ($H2$, $\gamma_{21} = .28$, $t\text{-value} = 3.21$). “Equity of income distribution” has a significant impact on “participation in decision-making” ($H3$, $\gamma_{12} = .41$, $t\text{-value} = 4.84$). “Social impacts” has a non-significant positive effect on “participation in nature conservation” ($H4$, $\gamma_{23} = .07$, $t\text{-value} = 1.13$). In addition, “participation in decision-making” has a significant effect on “participation in nature conservation” ($H5$, $\beta_{21} = .37$, $t\text{-value} = 3.83$). Thus, hypotheses one, two, three, and five were supported. Moreover, the results support the mediating role of “participation in decision-making.” “Economic gains” and “equity of income distribution” have significant indirect effects on “participation in nature conservation” with .25 at $p < .05$ and .33 at $p < .01$, respectively through “participation in decision making.” Figure 1 shows the model results of the study.

Figure 1
Estimates of proposed overall model



^a $p < .01$. Path Coefficient (t-value) (two-tailed test). $\chi^2 = 89.79$, $df = 28$, $p = .000$, $GFI = .92$, $CFI = .90$, $SRMR = .065$, $RMSEA = .10$

CONCLUSIONS

Local participation in ecotourism is a key factor for sustainable development. Although each stakeholder has a different view of development direction, active local participation increases local control over the developing the tourism overall. Local participation reflects the local community's wants and needs related to the project as well as encompasses their knowledge and experience, resulting in better solutions. The current study investigated how the impacts of ecotourism influence local participation in ecotourism development by testing a conceptual model. The current study found significant influences of economic impacts on local participation. The results can be beneficial to ecotourism stakeholders, especially the government and/or the tourism industry that they can motivate local community to participate in the ecotourism development through positive economic impacts on the society.

Economic gains such as increased household income and employment opportunities are the most noticeable benefits that local people receive (Timothy, 1999). The results of this study found that direct economic benefits empower local people to become actively involved in decision-making. This may be because increased economic gains enable local people to free themselves from everyday survival and to pursue a long-term goal for their own development (Timothy, 1999; Timothy & Tosun, 2003). Ecotourism can be called community-based when the resources are used by local people through operating tourism businesses and the generated income is invested to improve their standard of living (Funnell, 2003). Considering that ecotourism is usually initiated in less developed and pristine places; however, incompetence within the local community is one of the main reasons for limited local earning to share. For example, because ecotourism itself may be a new industry to locals, they either do not have experiences in this emerging industry nor may they have enough skills and knowledge related to it (Timothy, 1999; Tosun, 2000). Less skilled and less educated people in the community receive low wages and endure hard working conditions (Tosun, 2000). With limited knowledge and skills, local people are usually offered temporary positions with low wages, while non-local people are employed for the positions that require special skills (Lu, Fu, Chen, Xu, & Qi, 2006; Wilkinson & Pratiwi, 1995). When this situation gets intense, the people with more capital and skills become the high class of the community, and this situation eventually discourages local people from participating in decision-making. Thus, to maximize the economic benefits to the local community, the local people should prepare for the new economic opportunities through education and training. When appropriate educational programs are provided, people can increase their awareness about ecotourism and become empowered to make informed decisions for their own development (Timothy, 1999; Zhang, Yang, & Li, 2005).

In addition to economic gains, equity of income distribution has a significant influence on local participation in decision-making. The equitable income distribution is as important as the total amount of cash flow to the community (Scheyvens, 1999, 2003; Wilkinson & Pratiwi, 1995). Of course, each resident has a different level of involvement in ecotourism initiatives. Thus, equal distribution is not always applicable when the locals can have different preconditions, motivations, and input to respond to the development process (Wunder, 2000). Inequity of income distribution, however, is a potential source of problems including feelings of ill-will, jealousy, or even discord among residents (Scheyvens, 1999). Further, the leakage of tourism income to those outside the local community and a limited number of employees drawn from local residents results in inequitable distribution of tourism income. For more equitable distribution, leakage should be minimized so that more income is shared by local community. This is possible when local people use their own resources for the ecotourism industry (Funnell, 2003). As one solution, there has been great support for small-scale, locally-owned enterprises for ecotourism business (Butcher, 2006; Scheyvens, 2003). This type of business can minimize the leakage of tourism income beyond the local community (e.g., foreign investors), increase local people's control over tourism, and enhance the local peoples' pride and self-fulfillment (Scheyvens, 2003).

This study found that economic gains are an excellent means of nature conservation directly and indirectly through participation in decision-making. The results supported previous research that economic benefits increase environmental awareness and nature conservation (Boo, 1991; Ryel & Grasse, 1991; Wunder, 2000). Economic benefits enable local residents to see the close relationship between their living and nature conservation (Lu et al., 2006). That is, as people realize their natural environment is a source of generating income, they are given a self-imposed rationality to protect natural resources (Wunder, 2000). The non-significant results of social impacts on participation in nature conservation contradicted previous knowledge that positive social changes motivate local people to conserve their natural resources. This may be because economic impacts have a more dominant and direct effect on local residents' livelihood compared to social impacts. The Shaanxi Province, where the survey was conducted, is located in inland China. Because China has adopted a regionally-unbalanced growth strategy, the

income disparity between the coastal and the inland areas became an impediment to economic growth of China as a whole (Wen & Tisdell, 2001). The inland has been identified as economically disadvantaged compared to the coastal area such as Shanghai. For example, GDP per capita in 2005 in Shanghai was approximately seven times higher than that in Shaanxi during the same period (China Internet Information Center, 2008). Feeling urgency for economic growth, local residents in the under-developed area may place more emphasis on economic growth than social development. This study supports the notion that economic incentives are vital for conservation of natural resources by local residents (Wunder, 2000). Direct and indirect economic impacts improve local participation to protect their natural resources. It should not be taken that social impacts are not as important as economic impacts on local community, however. Positive social impacts such as water and power supplies empower local people with the benefits of ecotourism. Improved social infrastructure not only works for facilitating the whole process of tourist experiences in the destination area, but also improves the quality of life within the local community. Thus, social considerations need to be included in ecotourism planning for sustainable development.

Along with economic gains, local participation in decision-making has a significant effect on nature conservation. This supports the notion that the more local residents are involved in the planning process, the more they appreciate and protect their natural resources. Open discussions through the decision-making process not only provide opportunities to establish locally- determined goals, but also increase locals' understanding about the importance of ecotourism and nature conservation in their region. Thus, local participation in decision-making should be re-emphasized for nature conservation as well as for more local influence on the outcome of ecotourism development. In conclusion, economic impacts, such as economic gains and equity of income distribution significantly influence participation in decision-making and nature conservation of the local community. Local participation in decision-making increases local control over development by establishing local residents' own goals for the development based on their wants and needs. In addition, it improves local awareness of nature conservation. This study emphasized that local participation is essential for successful ecotourism development. However, it should be noted that automatic, community-led tourism, which requires local capacity and local organization and resources are not easily fulfilled simultaneously in reality (Wunder, 2000). Therefore, the collaboration of stakeholders, including local community, authorities, the tourism industry, and tourists (Bjork, 2000) is required for sustainable ecotourism development. Community-led tourism development should be understood as a long-term development, which requires gradually implementing strategies for local management.

LIMITATIONS AND SUGGESTIONS

Although this study provided valuable information on the ecotourism impacts and their influences on ecotourism participation, it is not free from the limitations. One limitation is that the data was collected from three communities with high growth in ecotourism development. Thus, there is a possibility that data from different stages of the tourism destination cycle may produce different results. The proposed model should be retested using data from other contexts of ecotourism development. Another limitation is that this study used a relatively small number of measurement indicators for constructs. Although these items were selected from a thorough literature review, more items are needed. It is therefore suggested that similar studies in the future address this limitation. In addition, the survey was conducted in under-developed areas in China. Thus, the application of the proposed model is limited to the less-developed countries or regions. The model should be tested in developed areas. For example, the influence of social impacts on participation in nature conservation was not significant in this study. These results may differ in developed areas. It is therefore suggested that similar studies in the future address this limitation.

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PREDICTING REVISIT INTENTIONS OF TOURISTS WHO VISITED PHUKET AFTER TSUNAMI

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ABSTRACT

This study attempts to apply the theory of planned behavior (TPB) model in the context of a disaster recovery process. Subjective norm, perceived behavior control, attitude, and past behavior have a positive impact on revisit intention of visitors who selected Phuket as a travel destination after the Tsunami. Interestingly, the positive influence of subjective norm on tourist behavior intention was greater among tourists from Western countries than from Asian countries. Understanding how tourists' images toward Phuket change as a travel destination after a natural disaster will aid in implementing destination marketers' effective promotional strategies.

Key Words: tsunami, attitude, subjective norm, perceived behavior control, theory of planned behavior

INTRODUCTION

Arguably no other industry in the world has suffered more from crises than tourism (Leaf, 1995). Crises can occur in many different forms, including human-caused disasters and natural disasters. Many researchers have focused on the negative effects of human-caused crises such as terrorist attacks and political unrest (Leslie, 1999; Mansfeld, 1999). These studies have concentrated on the effects of the crises on tourism activities and on the responses from within the tourism sector. However, additional research is still needed to assess the impact of a devastating natural disaster on tourists' revisit intention to a travel destination.

On December 26, 2004, an earthquake occurred in the Indian Ocean, resulting in an Asian Tsunami. According to the Tourism Authority of Thailand (TAT), the Tsunami destroyed about 40% of the 53,000 hotel rooms in six southern Thai provinces (Phuket, Phang-Nga, Krabi, Ranong, Satun, and Trung). One report stated that as many as 250 people, more than half of whom were foreign tourists, were killed in Phuket (Tsunami, 2005). A catastrophic natural disaster can turn tourism flows away from affected destinations. In Phuket, the impact of the natural disaster applied not only to the time of the crisis, but also to the period following it. The disaster represented a turning point in the evaluation of the destination. Yet how the tourism sector copes with disaster situations has not received a great deal of attention in tourism management research.

Therefore, this study seeks to address a deficiency in existing research: to test empirically the applicability of the extended TPB model in predicting tourists' post-Tsunami revisit intentions when choosing a travel destination in the future.

ANTECEDENTS OF TOURISTS' REVISIT INTENTION AND HYPOTHESES

The theory of planned behavior (TPB) is a cognitive model of human behavior that focuses on prediction and understanding of clearly defined behaviors. People act in accordance with their intentions and perceptions of control over the behavior, while intentions in turn are influenced by attitudes toward the behavior, subjective norms, and perceptions of behavior control (Ajzen, 1985). The theory of planned behavior postulates three conceptually independent determinants of intention: attitude toward the behavior, subjective norm, and perceived behavioral control. Norman, Conner, and Bell (1999) argued that other variables could further enhance the model's predictive utility and significantly improve its predictive power. Conner and Abraham (2001) mentioned that additional constructs might enhance the theory of planned behavior. Bentler and Speckart (1979) suggested that past behavior, which was not included in the TPB, could have a direct impact on the formation of behavioral intention under the

assumption of stable determinants. Ajzen (1991) also posited that past behavior can be used to test the sufficiency of any model because past behavior provides a control for at least some of the omitted variables.

Other studies have demonstrated the application of TPB in various contexts. These studies have shown strong predictive utility for a wide range of behavioral intentions and actual behaviors: choosing restaurants (Cheng, Lam, & Hsu, 2006); deciding on a travel destination (Lam et al., 2005); smoking (Norman et al., 1999); eating low-fat food (Armitage & Conner, 1999); and engaging in physical activity (Courneya et al., 1999). In general, the literature supports the predictive power of TPB on behavioral intentions.

Given the four constructs of attitude, subjective norm, perceived behavioral control, and past behavior, a relationship between each construct and behavioral intention is hypothesized. The theoretical support of the relationships is described as follows.

Attitude

Attitude refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question. Prislin and Quellette (1996) found that highly embedded attitudes toward preservation of the environment were more strongly related to an aggregate measure of behavioral intentions than were low-embedded attitudes. Crano (1997) realized that vested interest does affect the strength of the relation between attitudes and behavior. Ajzen and Driver (1992) showed that leisure choice intention is predicted with considerable accuracy from attitudes toward behavior. Thus, it is hypothesized that tourists having a positive attitude toward a destination are more likely to revisit the destination in the future.

- Hypothesis 1: A positive attitude toward destination positively affects tourists' revisit intention.

Subjective Norm

The second predictor is a social factor termed "subjective norm," which refers to the perceived social pressure to perform or not to perform the behavior. Hee (2000) stated that subjective norm is social in nature, in that the consideration of whether he/she should perform an act is based on the opinions of the people important to him/her and on perceived social pressure to behave in a particular way. The role of subjective norm to predict intention has been successfully supported in many empirical studies. Vanucci and Kerstetter (2001) used TPB to explain meeting planners' intention to use the Internet to plan group meetings. The results of their studies revealed that subjective norm was found to be significantly related to their usage of the Internet. Buttle and Bok (1996) employed Theory of Reasoned Action (TRA) to explore business travelers' hotel choice process. They found a significant correlation between subjective norm and behavioral intention. Lam and Hsu (2005) used TPB to predict behavioral intention when choosing a destination; they also found a significant correlation between subjective norm and behavioral intention. Based on the results of empirical tests of the theories, it is hypothesized that tourists' relevant referents positively affect tourists' future behavior intention.

- Hypothesis 2: A subjective norm about a popular destination positively affects tourists' future behavior intention.

Asian and Western Culture

Asian and Western cultures have been differentiated from a number of characteristics (Cohen & Nisbett, 1994; Triandis, 1994). However, in cross-cultural research, it is the dimension of individualism and collectivism that has been heavily studied by previous researchers. Asian cultures are distinguished from Western cultures because Asian cultures are more collectivistic than individualistic in nature (Uba, 1994). Asian cultures generally depend on group-oriented values such as family, cooperation, harmony, and mutuality. On the other hand, Western cultures tend to encourage values due to a greater emphasis on the importance of the individual person. Traditionally, Asian people have tended to perform acts based on their family members' opinions (Yang & Rosenbatt, 2000). Hence, it is hypothesized that the positive influence of subjective norm on tourists' behavior intention will vary among tourists from Asian countries more than those from Western countries.

- Hypothesis 2-1: The relationship between subjective norm and tourists' future behavior intention will vary depending on a tourist's country of origin (i.e., Asian vs. Western countries).

Perceived Behavior Control

The third antecedent of intention is the degree of perceived behavioral control. Perceived behavioral control refers to people's perceptions of the ease or difficulty of performing the behavior of interest. Oh and Hsu (2001) used a modified TPB model to find a significant relationship between perceived behavioral control and behavioral intention in examining gambling behaviors. Ajzen and Driver (1992) found a significantly high correlation between perceived behavioral control and behavioral intention in leisure choice behaviors. Therefore, it is assumed that perceived behavioral control is positively and directly associated with behavioral intention. This proposition has been successfully evidenced in many empirical studies using the TPB model to investigate various human behaviors.

- Hypothesis 3: Tourists' perceived behavioral control affects tourists' future behavior intention.

Past Behavior

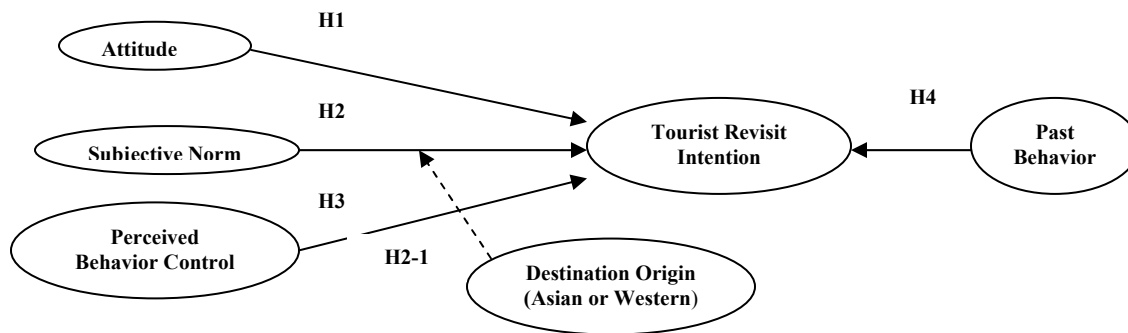
Many empirical studies have shown that past behavior can be used successfully as a predictor variable of behavioral intention and future behavior (Aarts, 1998; Ajzen, 2002; Oh & Hsu, 2001; Ouellette & Wood, 1998; Yoo, 2004). Ouellette and Wood (1998) conducted a meta-analysis of existing research data to test the direct effect of past experience on future response. Their study revealed that past behavior was an important predictor of future behavior and intention. Because of the empirical evidence of past experience's contribution to future behavior, this study includes past behavior as an antecedent of intention.

- Hypothesis 4: Past behavior positively affects tourists' future behavior intentions.

RESEARCH MODEL

Figure 1 shows a research model that forms the basis for, and provides general guidelines for, this study. The study applies the TPB model as a research framework to predict the behavioral intention of choosing a travel destination. The model is based on the four constructs of attitude, subjective norm, perceived behavioral control, and past behavior adapted from Conner and Abraham (2001).

Figure 1
Research Model



METHODOLOGY

Sampling and Data Collection

A two stage sampling approach, including quota sample and convenience sample, was used. First, a quota sample was utilized to select departure flights which are posted on the website of the Phuket International Airport. The quota was used to limit the number of respondents at each region to the predetermined number in order to obtain the variety of respondents who represent the total population. In 2003, international tourists were primarily from Asia (49.37%), Europe (41.45%), Oceania (4.24%), and the Americas (3.55%) (Immigration Bureau and Police Department, 2004). Based on statistical data from the year 2003, the quota of the sample from the selected inbound tourist markets were Asia (50%), Europe (40%), and others (10%). Second, a convenience sample was used to select individuals within the selected flights.

All questionnaires were collected on site. To collect the data, a questionnaire accompanied by a cover letter was distributed to international tourists waiting for departure at Phuket International Airport. Once respondents agreed to participate in the survey, the purpose of the survey was explained and a self-administered questionnaire was distributed to them for completion. The proposed model is empirically tested using data collected from 600 international tourists. According to Manfredo, Driver, and Tarrant (1996), a survey should be administered immediately after the trip or the activity in order to determine what the individual's past experience has been. Because the study was being used to determine tourist perception of destination attributes, it was appropriate to conduct the survey after the tourist experience. Phuket International Airport was chosen because tourists had already consumed tourism products or used services. At the airport, while waiting for their flights, tourists may have had time to complete the questionnaire about their visit to Phuket. The data collection period included both weekdays and weekends during the airport's operating hours at the time of the study period. Thai souvenirs including crystal, candle, and Thai silk books were given as incentives to stimulate survey participation. A field screening was conducted at the airport to check for completeness of the questionnaires. When international travelers returned the questionnaires, research teams thanked the tourists and let them choose one of the three types of gifts.

Data Analysis

Data analysis was undertaken in a series of steps. First, descriptive statistics were used to analyze demographic profiles. Next, factor analysis and reliability tests were conducted to examine the underlying dimensions of perception. Factor analysis is a useful technique to reduce large numbers of variables to a smaller set of factor groupings. Finally, the structural equation model (SEM) was adopted because this technique enables estimating simultaneously multiple regression equations in a single framework. All direct and indirect relationships in the model are estimated simultaneously, and therefore, this method allows all the interrelationships among the variables to be assessed in the same decision context.

RESULTS

Respondents' Demographic Profiles

Out of 600 respondents, 64.5% were male and 35.5% were female. The majority of the respondents were between the ages of 22 and 35 (40.5%) and 69.8% of them had a college education. About 17% of the respondents were in a management position, followed by professionals (14.2%), and self-employed (12.2%). Approximately 25% of the respondents' annual household income ranged from \$50,000 to \$74,999, while nearly 23% of them earned \$25,000 to \$49,999 each year. Respondents were primarily from Asia (43.5%), Europe (37.2%), Oceania (11.8%), and America (5.7%).

Underlying Dimensions of Important Attributes after the Tsunami

In order to verify the dimensions of important attributes perceived by tourists visiting Phuket after the Tsunami, exploratory factor analysis was performed. Factor analysis helps obtain a relatively smaller number of dimensions that explain most of the variations among the important attributes that attracted visitors to Phuket. The Principle Component Analysis with eigenvalues greater than one was rotated by the varimax analysis. Only factor loadings of 0.4 or higher were retained, indicating good correlations between the items and the factors to which they belonged (Hair et al., 1998). The final factor analysis generated five factors consisting of seventeen items accounting for 57.02 percent of the total variance (see Table 1). The five factors are "Outdoor Activities and Attraction," "Accessibility and Infrastructure," "Safety and Security," "Entertainment and Relaxation," and "Price and Value."

To test the reliability and internal consistency of each factor, Cronbach's coefficient alpha was calculated, and the factors with an alpha of 0.6 were retained for further analysis (Kline, 1994). The Cronbach's Alphas for the five factors, ranging from 0.61 to 0.73, were robust, indicating internal consistency among the variables within each factor.

Measurement Model

To assess the adequacy of the measurement model, a confirmatory factor analysis was performed. The fit between the structural model and data was evaluated by the goodness of fit indices including goodness of fit (GFI), root mean square error of approximate (RMSEA), comparative fit index (CFI), and normed fit index (NFI). The fit statistics indicate that the model provided a good fit to the data ($\chi^2 = 131.79$, $df = 64$, $p < .001$; $GFI = .97$; $RMSEA = 0.034$; $CFI = 0.99$; $NFI = 0.98$). The measurement model was further assessed for construct reliability and validity. Construct validity was evaluated by examining the statistical significance of each estimated loading, composite

construct reliability (CCR) (Anderson & Gerbing, 1988). As shown in Table 1, factor loadings on latent constructs provided evidence of convergent validity that provided evidence of satisfactory item convergence on the intended constructs. All indicators loaded significantly on their specified construct. Composite construct reliability (CCR) was also computed for latent construct. All four constructs surpassed the threshold value of 0.7. Taken together, these results indicate that the proposed measurement model is appropriate for further analysis.

Table 1
Results of Confirmatory Factor Analysis

	Standardized Loadings	t-value	CCR ^b
Attitude			.93
AT1 ^a : For me visiting Phuket was unenjoyable (1)/ enjoyable (7)	-	-	
AT2: For me visiting Phuket was boring (1)/fun (7)	.81	18.19	
AT3: For me visiting Phuket was unpleasant(1)/ pleasant(7)	.91	20.29	
AT4: For me visiting Phuket was harmful(1)/beneficial(7)	.85	18.95	
AT5: For me visiting Phuket was unfavorable(1)/favorable(7)	.90	20.12	
Subjective norm			.77
SN1: Most people I know choose Phuket as a travel destination.	.48	8.78	
SN2: Members of my family think it is a good idea to choose Phuket as a travel destination.	.75	12.58	
SN3: Members of my family approve of my visiting Phuket.	.79	13.09	
SN4: Most of my friends and acquaintances think that choosing Phuket as a travel destination is a good idea.	.77	13.21	
Perceived behavioral control			.70
PBC1: If I want, I could easily visit Phuket from now on (after crisis recovery).	.86	17.07	
PBC2: It is mostly up to me whether or not I select Phuket as my travel destination (after crisis recovery).	.59	12.50	
PBC3: Visiting Phuket is totally under my control even in case of crisis (Tsunami, Bird Flu, SARS-Severe Acute Respiratory Syndrome, and terrorist in Southern Thailand).	.48	10.17	
PBC4 ^a : A recovery campaign (reduced fares and special packages) factored in selecting Phuket as my travel destination.	-	-	
Future Behavior intention			.77
BI1: I intend to select Phuket as my travel destination in the future.	.70	15.57	
BI2 ^a : I would be willing to pay a higher rate to visit Phuket.	-	-	
BI3: I will recommend Phuket to others.	.77	18.00	
BI4: I will revisit Phuket.	.77	17.59	

Note: $\chi^2 = 131.79$, d.f. = 64 ($p < .001$), GFI=.97, RMSEA=.034, CFI=.99, NFI=.98.

a. The item was deleted after reliability test.

b. CCR: Composite construct reliability.

Table 2
The Results of Hypothesized Tests^a

Hypothesized relationship	Proposed model	
	Standardized path coefficient	Results
	(t-value)	
H1: Attitude → Behavior intention (γ_{11})	.17 (3.44) ^{***}	Supported
H2: Subjective norm → Behavior intention (γ_{12})	.23 (4.94) ^{***}	Supported
H3: Perceived behavioral control → Behavior intention (γ_{13})	.21 (4.61) ^{***}	Supported
H4: Past behavior → Behavior intention (γ_{14})	.10 (2.53) [*]	Supported

Note: $\chi^2 = 155.61$, d.f. = 75 ($p < .001$), GFI=.96, RMSEA=.044, CFI=.99, NFI=.97.

^a R^2 (Behavior intention) = .48.

*** $p < .001$. ** $p < .01$. * $p < .05$.

Structural Model

Structural equation modeling revealed a good level of fit ($\chi^2 = 155.61$, $df = 75$, $p < .001$; $GFI = .96$; $RMSEA = 0.044$; $CFI = 0.99$; $NFI = 0.97$). By examining the standardized path coefficients among variables, all the paths have statistically significant effects on behavior intentions [attitude ($\gamma_{11} = 0.17$; $p < 0.001$), subjective norm ($\gamma_{12} = 0.23$; $p < 0.001$), perceived behavior control ($\gamma_{13} = 0.21$; $p < 0.001$), and past behavior ($\gamma_{14} = 0.10$; $p < 0.05$)]. The significant, positive signs of all structural paths also supported all four hypotheses (H1, H2, H3, and H4).

Moderation Tests

The sample was split by nationality of respondents to form two subgroups that represent the Western people and the Asian people, 320 and 251, respectively. To assess how the hypothesized relationship (H2-1) varies according to destination origin, two subgroup models were tested and compared. The baseline model and the constrained model were compared. More specifically, the baseline model is based on the assumption that all estimated hypothesized structural paths are allowed to vary across the Westerns and the Asians. On the other hand, the constrained model assumes that only the hypothesized structural paths are constrained to be equal across the two subgroups (Joreskog & Sorbom, 1993). Because the two models are nested, the resulting one degree of freedom χ^2 difference test provides a statistical test for moderating effect of destination origin. A significant chi-square difference suggests that the equality constraints are not consistent with the data, and thus that a moderating effect exists (Joreskog & Sorbom, 1993). The results show that the effects of subjective norms and behavioral intention differ across the two subgroups ($\Delta\chi^2 = 3.79$, $df = 1$, $p < .10$), thus supporting H2-1. However, the relative importance is not consistent with the expected direction across the two subgroups. Interestingly, Westerners ($\beta_{12} = .26$, $p < .001$) displayed a stronger positive relationship between subjective norms and behavioral intention than did Asians who demonstrated no statistically significant difference ($\beta_{12} = .06$, n.s.).

Table 3
Structural Parameter Estimates for Two Group Comparison

Parameter	European (n = 320)		Asian (n = 251)	
	Estimate	t-value	Estimate	t-value
Subjective norm → Behavior intention β_{12}	.26	3.39***	.06	1.19 n.s.
Free model: $\chi^2 (151) = 543.11$ ($p < .001$) – Constrained model: $\chi^2 (152) = 546.90$ ($p < .001$) $\Delta\chi^2 (1) = 3.79$ ($p < .10$)				

** $p < .01$; *** $p < .001$; n.s. = non significant

DISCUSSION AND CONCLUSION

The findings of the study demonstrated that the most important attributes perceived by tourists visiting Phuket were found to be natural beauty rather than man-made environments such as shopping facilities, outdoor activities, festival and night entertainment, and golf courses. The salient attributes that come to foreign tourists' minds first are still limited to beautiful beach and sea, which restrains tourists' expenditure in more value-added areas, thus having a significant multiplier effect on local businesses. It is important for the Tourism Authority of Thailand (TAT) to take the necessary steps to reposition Phuket's image as a popular destination for night entertainment, a variety of shopping, and festivals and events. Understanding how tourists' images toward Phuket change as a travel destination after a natural disaster will aid in implementing destination marketers' effective promotional strategies, which will eventually lead to a dramatic increase in the number of international tourists and their expenditures, contributing to the local economy through inflow of foreign currency.

One of the challenges of tourism disaster management in Phuket is to ensure that the destination has drastically enhanced the tourists' most concerned attributes— safety and security issues as well as disaster protection and warning system— thus, fully restoring the tourism business activities back to the pre-disaster level. Without significant improvement in a disaster protection and warning system, many tourists may not return to Phuket. Achieving the goal of returning Phuket to its former level of success is a very difficult task, regardless of broad marketing campaigns which highlight the natural and scenic beauty and other attractions and entertainments. After a crisis, all stakeholders, at both local and national levels, should commit to adopting up-to-date technology to first

establish a Tsunami warning system and to second, develop disaster risk mitigation strategies by improving the physical structure of existing or new tourist facilities within a direct impact area should another Tsunami occurs.

Consistent with the finding of Lam and Tsu (2005), subjective norm has the largest influence on tourists' behavioral intentions among four antecedents. Overall, international tourists' behavioral intentions to visit Phuket are strongly influenced by reference groups' opinions. Perceived behavioral control had the second highest impact on tourists' behavioral intentions to visit Phuket. The result concurs with the previous finding of Oh and Hsu (2001). It is important to notice that tourists' behavioral control over their decisions to visit Phuket, even in case of a crisis such as Bird Flu or the Tsunami, has a strong influence on their revisit intentions.

Positive attitude positively affects tourists' revisit intention of choosing Phuket as a travel destination. Therefore, orchestrated efforts should be made by the TAT and Phuket government to develop and maintain a positive attitude toward international tourists. They should emphasize Phuket is a safe place that has more to offer its visitors than just its natural heritage, which includes the sea, sand, sky, beach, and world-renowned diving sites. The results of this study also demonstrated that past behavior positively affects tourists' future behavior intentions even if the relative magnitude of impact is the lowest. Past behavior of traveling to Phuket was measured by the frequency of their visits. Therefore, tourists who visited more often in the past are more likely to revisit because they may have good memories and had good experiences. Those satisfied tourists are more likely to spread positive word-of-mouth communication to other tourists about Phuket.

The proposed destination selection model, applying the TPB model, may advance the understanding in determinants of tourist behavior intention, especially in the context of a recovery process after a debilitating natural disaster. Another theoretical contribution of this study is to test whether the relationship between subjective norm and tourist behavior intention varies depending on a tourist's country of origin (Asian vs. Western countries). Interestingly, the findings in this study are not in line with our expectations. The positive influence of subjective norm on tourists' future behavior intention was greater among tourists from Western countries than from Asian countries. These unexpected findings may be attributed to the fact that most Western tourists were independent travelers who are more likely to have a high involvement level during their travel planning process. On the other hand, since a majority of Asian counterparts are package tourists, they tend to take advantage of reasonably priced package deals and may have a low level of involvement. Tourists with a low level of involvement are less likely to rely on other reference groups' opinions when they make a travel destination choice. Therefore, additional studies are needed to test the hypothesis for those two groups of Asian and Western tourists who have the same level of involvement. Thus, future researchers may be able to confirm the hypothesis when two groups of Asian and Western tourists who have the same level of involvement are compared.

There were of course some study limitations that need to be acknowledged. First, a cross-sectional survey was used to investigate a sample from the target population at only one point in time to answer perceptual difference in attributes affecting tourists' travel behavior intentions after the Tsunami. The respondents may have difficulty in recollecting their previous experiences and thus may have some memory biases. This study was conducted in the peak season, and thus the results were limited to travelers who travel during this period of time. Tourists who travel in different seasons may have different points of view toward destination. To overcome this limitation, longitudinal designs could be adapted in the future research to gain a more precise understanding of tourist behavioral changes over time. Except for the four antecedents used to predict tourists' future behavior intention, there might be additional determinants affecting tourists' future behavior intention. In addition, future researchers should investigate additional moderating variables, which would further facilitate in explaining tourists' revisit intention.

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CUSTOMERS' RESPONSES TO PARTICIPATION AND CUSTOMIZATION IN FOODSERVICES: A COMPARISON OF US AND TAIWAN CUSTOMERS

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ABSTRACT

In this study, we investigate customers' responses to participation and customization in foodservices from a cultural perspective. The likelihood of the self-serving bias when customers highly participated in the service production/delivery process was examined. We conducted a 2 participation (low vs. high) x 2 customization (low vs. high) x 2 outcome (positive vs. negative) quasi-experiment in two countries: the United States and Taiwan. Our research findings suggest that the self-serving bias did not exist in the foodservice setting. Meanwhile, customers' responses to customization and the likelihood of the self-serving bias did not differ between the two countries.

Key Words: customer participation, customization, self-serving bias, foodservices

INTRODUCTION

The benefits and costs associated with customer participation in services have been examined by researchers, but rarely in the foodservice settings. Researchers suggest that the benefits of customer participation include lower prices, faster and efficient service delivery, greater customization, and perceived greater control (Kelley, Donnelly and Skinner, 1990). Nowadays, consumers are provided the opportunities that enable them to customize their foodservice products according to their individual preferences through different levels of participation. For example, in the U.S, several foodservice companies, such as Subway have embraced the concept of user customization, and customers essentially design their own products (sandwiches). In Asian countries, it is not uncommon to find self-service "Hot Pot" restaurants, where customers actually move and pick ingredients and then cook the food at their tables.

The purpose of this study is to compare customers' responses to participation and customization in foodservices from a cultural perspective. It is of interest to investigate whether customers across the two cultures would respond differently to restaurant scenarios based on different participation and customization levels. We conducted a 2 participation (low vs. high) x 2 customization (low vs. high) x 2 outcome (positive vs. negative) quasi-experiment in two countries: the United States and Taiwan. A total of 247 U.S. samples and 213 Taiwanese samples were obtained. Significant findings and the managerial implications are discussed.

LITERATURE REVIEW AND RESEARCH QUESTIONS

Mass Customization

A contradiction to the globalization concept is that people no longer want to sacrifice their individual differences and they are willing to pay more for what they want and need (Pine, 1993). The advance in technology and the flexible work processes have permitted companies to customize goods and services based on individual needs in high volumes but at a relatively low cost (Gilmore and Pine, 1997). The core of this new mass customization paradigm is to create variety and customization through flexibility and quick responsiveness (McCutcheon, Raturi and Meredith, 1994) with the goal to develop, market and deliver good and services with variety and customization so that almost everyone can find exactly what they want (Mckenna, 1991). The rationales for mass customization are **common uniqueness**: every customer is not the same and **sacrifice gaps**: there is a difference between a company's offerings and what each customer truly desire (Gilmore and Pine, 1997). Therefore, mass customizers must rely on these sacrifice gaps to design their customization approaches.

Cultural Orientation and Responses to Personalization

Customers might have different responses to the customization strategy, and marketers can not assume that this strategy would always succeed. Kramer, Spolter-Weisfeld, and Thakkar (2007) examined the effect of cultural orientation on consumers' responses to personalized offers. The concept of personalization is slightly different from customization even though they both emphasize the importance of satisfying individual preferences. Customization provides customers the opportunities to configure a product by altering product attributes to meet their individual preferences, whereas personalization provides customers several product offerings that have been designed to match their individual preferences closely (Kramer et al., 2007).

Prior research has found that personalization contributes to greater customer satisfaction and loyalty (Alba et al., 1997; Häubl and Trifts, 2000). However, there is no reason to assume that consumers equally value individual preferences when they make product choices (Kramer et al., 2007). Cultural studies have shown that customers' individual preferences may be less important than the collective preferences of relevant in-groups, as members from collectivistic cultures are less concerned with being distinct from others (Iyengar and Lepper, 1999). In their study, Kramer et al. (2007) conducted three experiments to examine the effect of cultural orientation (interdependent-independent, collectivism-individualism, and ethnicity) on consumers' responses (brand attitude) to a personalized product offer. Their research findings show that consumers with interdependent or collectivistic tendencies favor less a personalized offer based on their individual preferences.

Since customization and personalization strategies share the same core concept, through this study we explore whether cultural orientation also has an impact on consumers' responses to customization strategies in the foodservice setting. According to the literature, the United States is viewed as an individualistic culture, whereas Taiwan is more of a collectivist culture than individualistic (Ali et al., 2005). We compare consumers' responses to customization using samples from the United States (individualistic) and Taiwan (collectivist). Specifically we propose:

P1: U.S. customers would respond more positively to customization in the foodservice than Taiwanese customers.

Customer Participation in Service

Customer participation is defined as "the degree to which a customer is involved in producing and delivering the service" (Dabholkar, 1990, p.484). Earlier research on customer participation in the production process mainly focused on the cost reduction and productivity gains associated with customer participation (Lovelock and Young, 1979; Mills, Chase and Marguiles, 1983). More recently studies look at customer participation from the perspective of value co-creation with the firm. Mascarenhas et al. (2004) suggest that customers should be involved in the value chain to create a competitive experience of co-production with the firm.

Bendapudi and Leone (2003) investigate the psychological implications of participation on customer satisfaction drawing on the self-serving bias from the social psychology literature. Self-serving bias is defined as a person's tendency to claim more responsibility than a partner for success and less responsibility for failure than a partner when the outcome is produced jointly (Wolosin, Sherman, and Till, 1973). Bendapudi and Leone's study (2003) shows that when the outcome is better than expected, those who participate in production will be less satisfied with the firm than those who don't participate as a result of the self-serving bias. This is because those who participate claim more responsibility for the good outcome and attribute less responsibility to the firm. However, according to the self-serving bias theory, a customer who participates in the production might not be so eager to claim responsibility when the outcome is worse than expected. Bendapudi and Leone (2003) also suggest that culture differences exist in the likelihood of a self-serving bias, and this bias is more salient in individualistic culture such as the United States than in collectivistic culture such as Asian countries (Heine and Lehman, 1997).

In this study, the participation level is defined as the level of customers' physical inputs in delivering or producing the foodservice products. In Bendapudi and Leone's study, they employed six products (bookshelf, poster frame, jeans, deposit, hotel stay and weight loss) to examine the existence of the self-serving bias in customer participation. Through this research effort, we examine whether the self-service bias exists in the context of foodservice, and whether cultural differences exist in the likelihood of self-serving bias by comparing the U.S. and Taiwan samples. Specifically, we propose:

P2: In the foodservice context, there is a higher likelihood of the self-serving bias among U.S. customers than Taiwanese customers.

RESEARCH METHOD

This study employs a 2 participation level (high vs. low) x 2 customization level (high vs. low) x 2 service outcome (better than expected vs. worse than expected) quasi-experiment in the U.S. and Taiwan. In the U.S., 247 participants were randomly selected from two sources: visitors to a large annual art festival in the Northeast and students in a Northeast university. In Taiwan, participants were randomly recruited from public areas in Taiwan such as parks, the cultural center, campuses and the airport. Of the total 213 Taiwanese participants, approximately 10% were Taiwanese students in a large northeast University in the U.S.

The studies in both countries follow the same procedures. At first, participants were randomly assigned to a restaurant service scenario. After reading the scenario, participants provided their satisfaction with the service process. An outcome scenario was then provided, and participants evaluated the overall service experience after the outcome is known. In the second part, participants answered questions that measure their subjective product expertise and internal locus of control. In the last section, participants provided demographics and other information, including age, gender, marital status, ethnicity, income level and frequency of cooking by themselves per week.

Stimulus

Manipulation

The first two variables of interests: level of participation and level of customization were manipulated in this study. We manipulated the level of participation by the degree of physical efforts required to participate in the service, whereas customization level is determined by whether customers can choose among various ingredients or cooking methods to configure their dishes. Four restaurant service participation scenarios (2 participation levels x 2 customization levels) were developed. The third variable of interest-outcome was manipulated similar to Bendapudi and Leone's study (2003). Two outcome scenarios were developed. For the "better than expected" scenario, participants were told that the dishes they purchased taste better than they expected. For the "worse than expected" scenario, participants were told that the dishes they purchased are not as delicious as they expected. (see Appendix for examples of the scenarios).

Measurement

Subjective product expertise and internal locus of control

Four-items modified from measures by Rgahubir and Corfman (1999) were used to measure participants' product expertise (cooking knowledge and skill). In seven-point Likert scales anchored at 1="Strongly disagree" and 7="Strongly agree", participants answered their agreement statements such as "I am very knowledge about cooking/meal preparation.", and "I am very skillful in cooking/meal preparation." To measure participants' *internal locus of control*, a five-item scale was used, modified from the service locus of control scale developed by Bradley and Sparks (2002). In seven-point Likert scales anchored at 1="Strongly disagree" and 7="Strongly agree", participants answered agreement with statements such as "Usually, my own skills and ability will make a big difference to the result I receive", and "Usually, I know I will get better result if I really try hard."

Process and overall satisfaction

Participants' satisfaction was measured twice: one for process satisfaction before the outcome was provided, the other for the overall experience after the outcome was provided. In the seven-point Likert scales (modified from Crosby and Stephens, 1987) participants answered questions such as: "How would you rate your overall satisfaction with this restaurant? (1=very dissatisfied; 7=very satisfied)", "Please indicate your favorability for this restaurant. (1=very unfavorable; very favorable)", "How satisfied are you with this restaurant experience? (1=very dissatisfied; 7=very satisfied)".

Manipulation check and other information

Several questions were designed to confirm that the manipulation of participation and customization levels were appropriate. For participation, in a seven-point Likert scale (1=strongly disagree; 7=strongly agree), participants answered their agreement with statements such as: "According to the scenarios, in this restaurant, I

participated to produce my dish/meal.” For customization, participants answered their agreement with statements such as “According to the scenarios, in this restaurant, I was able to customize a dish according to my preferences”.

RESULTS

Participants Profiles

Table 1 shows the descriptive statistics of U.S. and Taiwanese participants. The U.S. sample consists of more male (55.7%), whereas the Taiwanese sample consists of more female (60.1%). For both samples, most participants have some college or bachelor degrees (around 65%). However, more U.S. participants have master or higher educational degree (24.4%) compared with the Taiwanese sample (18.1%). Meanwhile, a higher percentage of the participants were single in both samples. The income distributions of the two samples are also similar. The average age is around 30 year old for both samples.

However, the two samples are different in their average cook day per week, their subjective product expertise (cooking knowledge, skill and interest) and their internal locus of control. The U.S. participants significantly ($t = -8.139$, $p = 0.000$) cook more per week than the Taiwanese participants, and this represents the different life style in this two countries. In Taiwan, small scales restaurants are easily accessible offering meals that are much cheaper as compared to the U.S. Therefore, people in Taiwan generally don't cook as much as those in the U.S. The subjective product expertise of U.S. participants is significantly higher than Taiwanese participants ($t = 9.660$, $p = 0.000$). However, the internal locus of control of Taiwanese participants is significantly higher than the U.S. counterparts ($t = 4.246$, $p = 0.000$).

Table 1
Participants Profile

Variables		US	Taiwan
Gender	Male	55.7%	39.4%
	Female	44.3%	60.1%
Education	High school	9.8%	16.0%
	Some College	33.7%	17.9%
	Bachelor	32.1%	47.6%
	Master	18.3%	14.3%
	Doctorate	6.1%	3.8%
Ethnic Background	Caucasian	80.1%	
	African American	4.5%	
	Asian	9.8%	N/A
	Latin American	3.3%	
	Other	2.4%	
Marriage	Single	55.3%	57.5%
	Married	33.7%	40.1%
	Living with a partner	7.7%	2.4%
Income*	Under \$25,000/NT\$300,000	24.0%	20.9%
	\$25,001-	20.4%	29.1%
	\$50,001-	15.6%	14.6%
	\$75,001-	17.3%	11.2%
	Above \$100,000/NT\$1,000,000	22.7%	24.3%
Age		Mean = 30.66	Mean = 33.09
Cook per week (days)		Mean = 3.58	Mean = 1.96
Product expertise		Mean = 5.07	Mean = 3.77
Internal locus of control		Mean = 5.22	Mean = 5.59

*1USD ≈ 31 NT\$

Validity and Reliability

Confirmatory Factor analyses and reliability tests were conducted to assess the internal validity of the measurement scales. For the U.S. data, an examination of the correlation matrix shows some significant correlation

among the variables with the KMO equal to 0.840 (greater than 0.5) and Bartlett's test of sphericity sig. = 0.000. For the Taiwanese data, KMO equal to 0.801 (greater than 0.5) and Bartlett's test of sphericity sig. = 0.000. These results indicate the appropriateness of factor analyses. Using SPSS statistical software, principle component analyses were performed with four factors designated and Varimax rotations. For the U.S. data, the result shows that all items load into four components with 78.041 % of the total variance explained. The reliability tests suggest consistent results and all Cronbach Alpha values are above 0.8. For the Taiwanese data, the result also shows that all items load into four components with 76.351 % of the total variance explained and all Cronbach Alpha values are above 0.75. Therefore, according to these analyses, the measurement scales were appropriate for both U.S. and Taiwanese samples.

Manipulation Check

For both U.S. and Taiwan samples, two sample t-tests were performed to determine whether the manipulation of participation and customization levels in the restaurant scenarios were successful. In the U.S. sample, the results show that those in the high participation scenario perceived significantly higher participation than those in the low level scenario (question 1: $t=-4.423$, $p = 0.000$; question 2: $t=-4.770$, $p = 0.000$). For customization levels, the result shows that those in the high customization scenario perceived significant higher customization than those in the low level scenario (question 1: $t=-11.158$, $p = 0.000$; question 2: $t=-10.015$, $p = 0.000$).

In the Taiwanese sample, the manipulation check of participation levels shows that those in the high participation scenario didn't perceive significantly higher participation than those in the low level scenario (question 1: $p = 0.855$; question 2: $p = 0.751$). One possible explanation for this result is the inappropriate Chinese translation of the manipulation check questions, and another possible explanation is that Taiwanese participants might have different perceptions of participation in foodservice. The manipulation of customization levels was successful and the result shows that those in the high customization scenario perceived significant higher customization than those in the low level scenario (question 1: $t=5.697$, $p = 0.018$; question 2: $t=8.814$, $p = 0.003$).

Responses to Customization and Participation in Foodservices

One of our research purposes is to explore whether there is a cultural influence on customers' responses to customization in foodservices. To this end, a three-way ANOVA analysis was performed. Country (U.S. and Taiwan), customization (low vs. high), and participation (low vs. high) were fixed factors, whereas process satisfaction was the response variable in this analysis (table 2). The results show significant Customization main effect ($F=53.102$, $p=0.000$) and Customization x Participation interaction effect ($F=6.87$, $p=0.009$). By examining the marginal means, we suggest that participants in both countries favor most the high customization vs. low participation condition (U.S. mean=5.213; Taiwan mean=5.014), followed by the high customization vs. high participation condition (U.S. mean=4.545; Taiwan mean=5.009).

Table 2
Country, Customization and Participation ANOVA Results

Dependent Variable: process_sat_ave

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	86.175 ^a	7	12.311	9.778	.000
Intercept	9505.725	1	9505.725	7549.844	.000
country	.007	1	.007	.005	.942
Participation	.427	1	.427	.339	.560
Customization	66.859	1	66.859	53.102	.000
country * Participation	.646	1	.646	.513	.474
country * Customization	2.245	1	2.245	1.783	.182
Participation * Customization	8.650	1	8.650	6.870	.009
country * Participation * Customization	7.500	1	7.500	5.957	.015
Error	567.837	451	1.259		
Total	10209.313	459			
Corrected Total	654.012	458			

a. R Squared = .132 (Adjusted R Squared = .118)

The Country x Customization ($F=1.783$, $p=0.182$) interaction effect was not significant, indicating that no cultural influence between the U.S. and Taiwan was found on participants' responses to customization levels in the context of foodservice. The Country x Participation ($F=0.513$, $p=0.474$) interaction effect was also not significant, which also shows that no cultural influence between the U.S. and Taiwan was found in participants' responses to participation levels in the context of foodservice.

However, it is of interest that there was a significant interaction effect of Country x Customization x Participation ($F=5.957$, $p=0.015$). A further examination of the marginal means suggests that participants in both countries preferred most the condition of high customization vs. low participation followed by the high customization vs. high participation condition. However, for the high customization vs. high participation condition (customers cook the food), the magnitudes of process satisfaction were different between participants in the two countries. Specifically, a two-sample t-test indicates that Taiwanese participants rated significantly higher than the U.S. participants (U.S. = 4.545, Taiwan=5.009, $t=2.09$, $p=0.039$).

The Self-Serving Bias

The other purpose of this study is to explore whether the self-serving bias exists in the context of foodservice and whether there exists a culture influence on the likelihood of the self-serving bias. According to Bendapudi and Leone's (2003) study, under the self-serving bias, when the outcome is better than expected, customers who participate in production would feel less satisfied with the firm than those who don't participate. However, when the outcome is worse than expected, customers who participate in production would feel as satisfied with those who don't participate. Meanwhile, Bendapudi and Leone's (2003) suggested that culture differences exist in the likelihood of a self-serving bias, and this bias could be more salient in individualistic culture such as the United States than in collectivistic culture such as Asian countries (Heine and Lehman, 1997). Similar to Bendapudi and Leone's (2003) study, to exclude the potential influence of customization on participants' responses, we control customization at the low level for this part of analysis. Two-way ANOVA were performed for both U.S. and Taiwanese samples. Outcome (better than expected vs. worse than expected) and participation (low vs. high) were fixed factors, whereas overall satisfaction was the response variable.

For the U.S. sample, the results show significant Outcome main effect ($F=236.2$, $p=0.000$), but the Outcome x Participation interaction effects were not significant. For the Taiwanese sample, the results show significant Outcome main effect ($F=134.3$, $p=0.000$), but the Outcome x Participation interaction effects were not significant. Further analyses were conducted using Tukey simultaneous tests to compare the overall satisfaction by outcome and participation level for both samples (table 3). The results indicate that for both U.S. and Taiwanese participants, when the outcome is better than expected, there are no significant differences in overall satisfaction between those who participated in the production and those who didn't. However, consistent with the self-serving bias, when the outcome is worse than expected, there are no significant differences in overall satisfaction between those who participated in the production and those who didn't. In this study, no culture influence was found between the U.S. and Taiwan in terms of the likelihood of a self-serving bias in the foodservice setting.

Table 3
Outcome, Participation level and Satisfaction Change
(Customization is controlled at the low level)

Country	Outcome	Participation level	Overall Satisfaction	Tukey Simultaneous Tests
US	Better than expected	High	5.774	$t=1.680$, $p=0.3380$
		Low	5.339	
	Worse than expected	High	2.952	$t=1.619$, $p=0.3718$
		Low	2.532	
Taiwan	Better than expected	High	5.308	$t=0.253$, $p=1.000$
		Low	5.231	
	Worse than expected	High	2.731	$t=-0.402$, $p=1.000$
		Low	2.852	

DISCUSSION

This is the first study that examines customers' responses to customer participation and customization in foodservices from a cultural perspective. By measuring process satisfaction, our study results indicate that participants in the two countries (the U.S. and Taiwan) didn't respond differently to different levels of customization in foodservices. For customization levels, participants in the two countries both prefer high level of customization. However, by combining participation and customization factors, we found that participants in the two countries exhibit different magnitude of preference for the high participation vs. high customization scenario. Specifically, Taiwanese participations enjoy this scenario significantly more than the U.S. counterparts. This could be addressed by the significant differences in internal locus of control of participants and the cook days per week in the two countries. Researchers have suggested that people of higher internal locus of control have higher tendency to self-serve (Bradley and Sparks, 2002). Meanwhile, since U.S. participants cook at home more than Taiwanese participants on a weekly basis, it is reasonable that U.S. participants want to less cook the food themselves in a restaurant. Therefore, our study results suggest that restaurant marketers need to carefully examine the lifestyle of their target customers. A restaurant that requires customers to cook themselves might not be an attractive option for those who already cook frequently in their daily life.

This study also investigates whether the self-serving bias exists in the context of foodservices, and whether there is a cultural influence on the likelihood of the self-serving bias. For both countries, when the outcome is positive, our study suggests that the self-serving bias does not exist. This finding is promising in the sense that foodservice managers in the U.S. and Taiwan could encourage customers to participate more in foodservice delivery or production without worrying too much about the influence of the self-serving bias. When the outcome is negative, our study suggests that the self-serving bias does exist, and the overall satisfaction did not differ between those who highly participate and those who did not. This finding also suggests that foodservice managers in the U.S. and Taiwan could encourage customers to participate more in foodservice delivery or production even when there is a potential outcome failure. In our study, we found that the likelihood of the self-serving bias in the foodservice setting did not differ between the two countries. It could be implied that in the context of foodservices, cultural orientation might not influence the likelihood of the self-serving bias or that participants in the U.S. and Taiwan are actually similar in their cultural orientation. Future research can further investigate this phenomenon by employing participants in countries that have significantly different cultural orientations.

Limitation and Future Research

One limitation of this study is that the experiments were conducted in hot summer days, which could influence participants' responses to certain restaurant scenarios (i.e. not wanting to cook on hot days), such as the hot pot restaurant in the high participation vs. high customization condition. A study conducted in winter time might generate different findings. The other issue is that participants in the U.S. might not accept the concept of hot pot restaurant due to their eating habits, if a self-serve grill restaurant was used in the scenario, the U.S. participants might respond differently. To address this problem, future studies could employ more such examples in each scenario. Finally, to further examine the influence of cultural orientation on customers' responses to foodservice participation and customization, more samples from countries of different cultural orientation are required.

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APPENDIX

Restaurant Scenario I (High participation vs. High customization)

Your friends take you to a new restaurant for lunch. In this restaurant, a wide range of ingredients are provided for you to choose from. You can choose the ingredients you like and make your dish. After you choose the ingredients, you return to your table and there is a hot pot for you to cook them. You cook the dish and enjoy it at your table.

Restaurant Scenario II (High participation vs. Low customization)

Your friends take you to a new restaurant for lunch. In this restaurant, you have to move to different stations to select your meal. In each station, there are 3-4 fixed menu items for you to choose from, and these menu items have been prepared in the kitchen. After you have chosen your meal, you move to the register to it check out and sit down to enjoy the meal.

Restaurant Scenario III (Low participation vs. High customization)

Your friends take you to a new restaurant for lunch. In this restaurant, you can choose at the counter different ingredients for your dish. You can also choose one of the three cooking methods according to your preference. After you have chosen your meal, you move to the register to it check out and sit down to enjoy the meal.

Restaurant Scenario IV (Low participation vs. Low customization)

Your friends take you to a new restaurant for lunch. In this restaurant, you can select your meal at the counter. There are several fixed menu items for you to choose from, and these menu items have been prepared in the kitchen. After you have chosen your meal, you move to the register to it check out and sit down to enjoy the meal.

Outcome Scenario

You start having your meal, and you realize that the dish tastes better/worse than you had expected.

AN INVESTIGATION OF CONSUMER GRATITUDE AND POST-PROMOTION REPEAT PURCHASE INTENT

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ABSTRACT

This study explores the effect of sales promotion in the foodservice context. In particular, we investigated the effects of restaurant type and consumer gratitude on post promotion repeat purchase intent. We employed a 1 (promotion value: 25% discount) x 2 (restaurant type: quick service vs. casual dining) experimental design. The results suggest that sales promotion can enhance consumers' brand attitude given that the dining experience is positive. Consumers' gratitude toward sales promotion is positively related to their post promotion repeat purchase intent. Meanwhile, respondents high in grateful disposition showed a higher level of repeat purchase intent for a quick-service restaurant.

Key Words: sales promotion, gratitude, brand attitude, repeat purchase intent, foodservice

INTRODUCTION

Both short-term and long-term effects of sales promotions have been widely researched in the consumer product context. Some studies indicate a positive impact of sales promotions on brand evaluations; others suggest a negative effect on brand quality inference and evaluations, while some report no significant impact on brand loyalty. This study aims to explore the effect of sales promotions in the foodservice context. Factors that will be examined in this study include the product characteristic (the restaurant type) and consumer characteristics (personality traits). Specifically, we focus on a novel personality trait, grateful disposition, to better understand the impact of sales promotions on repeat purchase intent. As defined by McCullough et al. (2002), grateful disposition is "a generalized tendency to recognize and respond with grateful emotions to the role of other people's benevolence in the positive experiences and outcome that one obtains (p.112)."

LITERATURE REVIEW AND HYPOTHESES

Sales promotion

Consumer sales promotions are frequently used by marketers as temporary incentives to either motivate product or service trial or to stimulate sales (Kolter, 1988). Sales promotions come in various forms including price discounts, coupons, gifts, free samples, free products, and rebates. Among these various sales promotion tools, price discounts are most common (Darke and Chung, 2005) and their use has been steadily increasing over the years. Price discounts are employed to either decrease the price for a given quantity or to increase quantity at the same price for the purpose of creating value and economic incentives to purchase the product/service (Raghubir and Corfman, 1999). However, sales promotions, especially in the form of price discounts, might have a negative impact on brand evaluation and might not ultimately contribute to sales increase. The following section offers a brief overview of past literature on the impact of sales promotions on consumers' brand attitude and purchase behavior.

The effect of sales promotions on consumer attitude and behavior

There is no consensus regarding the short-term and long-term effects of promotions on consumer attitude and behavior. Some researchers suggest that sales promotions can undermine brand preferences whereas others believe the opposite (DelVecchio, Henard, and Freling, 2006). Various factors such as time of promotion, promotion type, promotion value, product characteristics, and consumer characteristics are believed to moderate the relationship between sales promotions and consumer choice (DelVecchio, Henard, and Freling, 2006). The results of

their meta-analysis, however, suggest that sales promotions do not statistically affect post-promotion brand preferences.

Yet, there is some support for the positive effect of sales promotions in the marketing literature. Drawing on learning theory, it is suggested that promotions can increase brand familiarity and experience (Mela, Gupta and Lehmann, 1997). Other studies also indicate that promotions have a significant short-term effect on consumers' brand choice (Guadagni and Little, 1983; Gupta, 1988). Ehrenberg, Hammond and Goodhardt (1994), however, conclude that for establishing brands, the effect of promotions on post-promotion brand loyalty might be minimal.

Moreover, prior research suggests that sales promotions might hurt the brand. Price-quality literature and attribution theory imply that consumers might regard sales promotions as informative cues that are negatively valenced, and therefore, consumers might attribute sales promotions to inferior product quality (Raghubir and Corfman, 1999). Specifically, Raghubir and Corfman (1999) suggest that the brand's promotional history, consumers' product knowledge and industry norms would moderate the negative impact of sales promotion on pre-trial brand evaluation. Interestingly, Darke and Chung (2005) found that consumer perceptions of the quality of discounted products might depend on how the promotion is framed. Their research suggests that "Every-day-low-price" offers are vulnerable to negative quality, but free gifts would maintain quality perceptions and increase deal value. In terms of long term effects, Mela, Gupta and Lehmann (1997) demonstrate that promotions might increase consumers' price and promotion sensitivity over time, and such effect is more salient among non-loyal consumers.

Sales promotion in the restaurant industry

In the restaurant industry, coupons have been a commonly used as a sales promotion tool, especially for quick service restaurants. The impact of coupons on repeat purchase in quick service restaurants was examined by Taylor and Long-Tolbert (2002). The authors argue that coupon redeemers are usually regular users and hence they form their quality perceptions based on prior experiences with the brand instead of using promotions as a cue for product quality. Their study was conducted in a college community and after controlling for past purchase history, the results show that students who redeemed the coupon were 7.5 times more likely to make an additional purchase after the coupon-redemption period than those who did not redeem a coupon.

In the context of foodservices, we first examine the effects of sales promotion on consumers' brand attitude change. Specifically, we propose that when the service outcome is positive, a sales promotion will increase consumers' trust in the brand and their perceptions of brand quality. In other words, we expect a positive change in attitude toward the brand following a hefty discount. Accordingly, we put forth the following hypothesis:

H1: In the context of foodservices, sales promotion will have a positive impact on brand attitude.

Grateful disposition

Gratitude can be considered an affective trait, a mood or an emotion (McCullough, Emmons and Tsang, 2002). This construct has been examined mostly in the psychology literature with scant references in consumer research. Gratitude has been defined in several ways. Weiner and Graham (1989) defined gratitude as "a stimulus to return a favor to the other and thus reintroduce balance" (p.403). Lazarus and Lazarus (1994) suggest gratitude as one of the "empathic emotions" that reflect recognition or appreciation of a benevolent gift. Finally, Minimally, Emmons and Crumpler (2000) define gratitude an emotional response to a gift, and felt appreciation after receiving an altruistic act. When regarded as an affective trait, gratitude can be called grateful disposition or disposition toward gratitude. McCullough et al. (2002) define grateful disposition as "a generalized tendency to recognize and respond with grateful emotions to the role of other people's benevolence in the positive experiences and outcome that one obtains" (p.112). From attribution perspective, it is suggested that dispositionally grateful people tend to attribute their positive outcomes to the efforts of other people or they recognize that many people contribute to their positive outcomes (McCullough et al., 2002).

Grateful disposition and personality traits

McCullough et al. (2002; 2004) indicate that gratitude can be considered a prosocial affect since it is a response to other people's behavior to contribute to one's welfare. In terms of the Big Five personality traits, grateful people might score high in Agreeableness. Conversely, McCullough et al. (2002; 2004) propose that grateful people would experience lower levels of negative emotions such as anxiety, depression and envy. Consequently, grateful disposition is likely to be negatively related to Neuroticism.

In fact, gratitude is a highly recognized and desirable human disposition in many religions such as Jewish, Christian, Buddhist and Hindu thoughts (Carman and Streng, 1989), which may encourage spiritual people to be more grateful. Spiritually inclined people may have a tendency to attribute positive human effort, such as a gift, to both human and non-human agent (God's intervention). It is, therefore, proposed by McCullough et al. (2002) that grateful people may be spiritually inclined and that they tend to interpret their well-being in a broader sense (e.g. luck, God or other conception of the divine).

The effect of gratitude on purchase intent

The focus of this study is to explore the role of consumers' grateful disposition on their responses to promotional efforts. McCullough et al. (2004) suggest that grateful disposition could motivate people to reciprocate the benefits they have received by repaying further benefits. A recent study by Soscia (2007) investigates the relationships among appraisals, consumption emotions and post consumption behaviors (i.e., repurchase intent and word of mouth etc.). Her study suggests that under goal congruency situations, gratitude can predict positive word of mouth and repurchase intent. We argue that when the sales promotion value is higher (i.e., a deeper discount), consumers with higher grateful disposition and gratitude toward sales promotion are likely to consider the sales promotion as a special "gift" or count it as a "blessing". Due their gratitude, these consumers are likely to reciprocate the benefits received via repeat purchase even after the promotion period has ended.

We also examine several personality attributes that contribute to gratitude toward sales promotions. It is proposed that consumers who are higher in agreeableness, more spiritual and religious will exhibit greater gratitude toward sales promotions than consumers who score low in those traits. Therefore, we propose the following:

H2: Consumers' post-promotion repeat purchase intent is positively related to grateful disposition.

H3: Consumers' post-promotion repeat purchase intent is positively related to gratitude toward the sales promotion.

H4: Consumers' gratitude toward sales promotion is positively related to agreeableness, religiousness and spirituality.

We now consider the joint effects of restaurant type and consumers' grateful disposition on repeat purchase intent. In H2, we suggest that consumers' grateful disposition will positively influence their repeat purchase intent. We propose that this effect would be influenced by restaurant types. In this study, we examine two types of restaurants: quick service and casual dining restaurants. With a quick service restaurant, where low price and fast service are emphasized, a price discounts should have a strong impact on consumers' brand evaluation and in turn, repeat purchase intent. Conversely, with a casual dining restaurant, where service quality and atmosphere are more important, a price discount would have a weaker impact on brand evaluation and in turn, repeat purchase intent. In line with previous argument, we propose that restaurant type and grateful disposition will have interactive effects on repeat purchase intent. Specifically, those who are high in grateful disposition will exhibit highest repeat purchase intent when assigned to a quick-service restaurant condition. We develop H5 as:

H5: Restaurant type and grateful disposition will have interactive effects on consumers' post-promotion repeat purchase intent.

RESEARCH METHOD

Research Design

The study employed a 1 (promotion value: 25% discount) x 2 (restaurant type: quick service vs. casual dining) experimental design. A sample of 97 undergraduate students in a large northeast public university was obtained. Respondents were randomly assigned to one of the two restaurant promotion scenarios.

In the quick service restaurant scenario, the sales promotion was manipulated as providing/redeeming a coupon of "25% off for purchase over \$10", and in the casual dining restaurant scenario, the corresponding promotion was described as providing/redeeming a coupon "25% off for purchase over \$30". To investigate how sales promotions influence consumers' brand attitudes, we employed two well-known restaurant brands: Subway and T.G.I. Friday's. The dining experience was described in a positive light (i.e., fast and friendly service, tasty food; see Appendix for the scenarios)

Measurement

Brand Attitude

Brand attitude was measured twice: before and after the sales promotional scenario. On a 1 to 7 scale, respondents rated the brand in the following four dimensions (Gresham, Bush and Davis, 1984): “very bad-very good”, “dislike very much-like very much”, “unpleasant-pleasant”, and “poor quality-high quality”.

Post-promotion repeat purchase intent

Post-promotion repeat purchase was measured via two dimensions: choice probability (Kahn and Louie, 1990) and brand loyalty (Gedenk and Neslin, 1999). Using a seven-point Likert scale (very unlikely to very likely), respondents indicated the likelihood of the following four items: “I will choose this restaurant after the promotion period”, “When there is no promotion in this restaurant, I will choose other restaurants” (Reverse scored), “I will still come back to this restaurant after the promotion period ends”, and “Even if there is no promotion, I will recommend this restaurant to my friends”.

Grateful Disposition and gratitude toward sales promotion

To measure consumers’ general grateful disposition, this study employed the gratitude questionnaire (GQ-6) developed by McCullough et al. (2002). Respondents indicated their agreement with the following six items: “I have so much in life to be thankful for”, “If I had to list everything that I felt grateful for, it would be a very long list”, “When I look at the world, I don’t see much to be grateful for” (Reverse scored), “I am grateful to a wide variety of people”, “As I get older, I find myself more able to appreciate the people, events and situations that have been part of my life history”, and “Long amounts of time can go by before I feel grateful to something or someone” (Reverse scored).

Specifically, to assess consumers’ gratitude toward sales promotion, we created three measurement items. Using a seven-point Likert scale (strongly disagree to strongly agree), respondents indicated their agreement with the following three items: “I feel grateful whenever I get a good discount in my purchase”, “I feel thankful whenever I get a good discount in my purchase”, and “I feel appreciative whenever I get a good discount in my purchase.”

Spirituality and Religiousness

As literature suggests that grateful disposition is correlated with spirituality and religiousness, these constructs were measured in this study. Using a seven-point Likert scale (strongly disagree to strongly agree), respondents indicated their agreement with the following six items (Piedmont, 1999 and McCullough et al., 2002): “I believe there is a larger meaning to life”, “I am concerned about those who will come after me in life”, “I often attend religious services”, “Religion is important in my life”, “My friends are involved in religious activities”, and “I often read religious literature.”

Personality

A Ten-item personality inventory was used to assess respondents’ Big Five personality domains (Extraversion, Agreeableness, Conscientiousness, Emotional Stability and Openness to New Experiences) (Gosling, Rentfrow and Swann, 2003). Each domain was measured by two items.

Manipulations check and Demographics

Respondents also answered two questions tapping into manipulation checks. On a seven point scale, they indicated their agreement with the following two statements: “The 25% discount in the scenario is a good deal” and “25% off is a deep discount in the context of foodservice.” Lastly, respondents provided some demographic information such as gender, age, and ethnic background.

RESULTS

Manipulation checks and internal validity

To determine whether the sales promotion manipulation was successful, we asked the respondents to answer two manipulation check questions. On the seven point scale, the mean scores for these two questions are both above 5 (question 1: 5.7; question 2: 5.18), indicating that the manipulation was appropriate. Moreover, reliability tests were performed to assess the internal validity of the scales used in the study. The Cronbach’s Alpha values for the scales are: brand attitude-0.92, brand evaluation-0.88, repeat purchase intent-0.84, grateful disposition-0.79 (Five items, one item dropped due to the lower factor loading), spirituality-0.41, and

religiousness-0.83. Except for the scale that measured spirituality, all other scales show adequate internal consistency.

Sales promotion and brand attitude

We first examine the effect of sales promotion on consumers' brand attitude. The results from a paired-t test show a significant increase in brand attitude from 5.115 to 5.492 ($t=-5.413$, $p=0.000$). Therefore, H1 is supported.

Gratitude and repeat purchase intent

The main focus of this study is to explore how consumers' grateful disposition influences their post-promotion repeat purchase intent. We also measured consumers' gratitude toward sales promotions as a potential factor that might affect their repeat purchase intent. A series of regression analyses were conducted to test hypotheses 2 and 3 (table 1). The results show that grateful disposition fails to predict repeat purchase intent, and therefore H2 is not supported. However, gratitude toward sales promotions is positively related to repeat purchase intent ($\beta=0.334$, $p=0.001$). Therefore, H3 is supported. A further analysis shows that grateful disposition is positively related to consumers' gratitude toward sales promotion and we can therefore conclude that gratitude toward sales promotions serves as a mediator between grateful disposition and repeat purchase intent.

Table 1
Regression Analyses

Dependent Variables	Independent Variables	Standardized Coefficients (β)	Sig.
Repeat purchase intent	Grateful disposition	0.092	0.377
Repeat purchase intent	Gratitude toward sales promotion	0.334	0.001*
Gratitude toward sales promotion	Grateful disposition	0.220	0.031*

* Significant at $\alpha=0.05$ level.

In this study, we also explored personality traits that contribute to grateful disposition and gratitude toward sales promotions. To that end, we conducted two multiple regression analyses (table 2) by including the big five personality traits, religiousness and spirituality as independent variables. The results show that two personality traits, extraversion and agreeableness, are positively linked to grateful disposition. As for gratitude toward sales promotion, consumers' spirituality, religiousness and agreeableness tendency are positively related to the gratitude toward sales promotion. These findings lend support to H4.

A series of ANOVA analyses were then performed to investigate the factors that influence consumers' agreeableness tendency, spirituality and religiousness. It was found that ethnicity is linked to religiousness ($F=3.499$, $p=0.011$). Among the respondents, 81% were Caucasian, 7% were African American, 5.3% were Asian, and 4.2% were Hispanic. Asian respondents scored the highest in religiousness (mean=4.800), followed by African Americans (mean=4.500) and Caucasians (mean=3.104). As expected, female respondents were significantly higher in agreeableness than male respondents (mean for females =4.868, mean for males=4.346, $p=0.054$).

Restaurant types, gratitude and repeat purchase

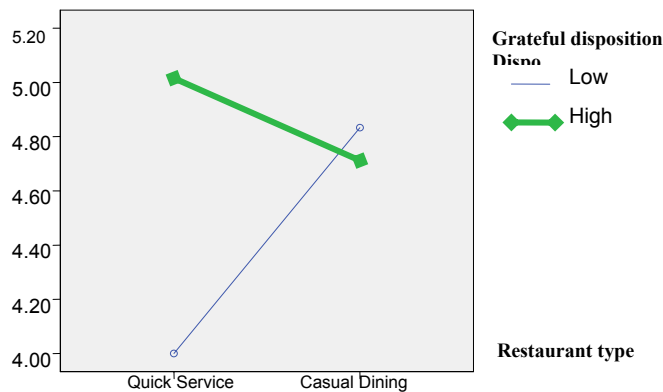
Lastly, we investigated how restaurant type and the grateful disposition might interact with restaurant type in influencing repeat purchase intent. Based on a median split, respondents were divided into two groups: low and high in grateful disposition. A two-way ANOVA was performed, and the results show a significant restaurant type by grateful disposition interaction effect ($F=5.584$, $p=0.020$, figure 1). Therefore, H5 is supported. As predicted, in the quick-service restaurant condition, respondents who were high in grateful disposition exhibited the highest level of repeat purchase intent (mean=5.016), whereas respondents who were low in grateful disposition exhibited the lowest level of repeat purchase intent (mean=4.000).

Table 2
Multiple Regression Analyses

Dependent Variables	Independent Variables	Standardized Coefficients (β)	Sig.	R ²
<i>Model</i>			<i>0.000*</i>	0.354
The grateful disposition	Spirituality	0.166	0.085	
	Religiousness	0.149	0.120	
	Extraversion	0.298	<i>0.003*</i>	
	Agreeableness	0.295	<i>0.002*</i>	
	Consciousness	0.102	0.294	
	Emotional Stability	0.020	0.824	
	Openness	0.114	0.245	
<i>Model</i>			<i>0.000*</i>	0.377
Gratitude toward sales promotion	Spirituality	0.308	<i>0.001*</i>	
	Religiousness	0.347	<i>0.000*</i>	
	Extraversion	0.006	0.948	
	Agreeableness	0.241	<i>0.008*</i>	
	Consciousness	-1.103	0.276	
	Emotional Stability	-0.238	<i>0.009*</i>	
	Openness	0.111	0.248	

* Significant at $\alpha=0.05$ level.

Figure 1
Restaurant Type x Grateful Disposition



Through this research effort, we found that in the foodservice context, a deep sales promotion (i.e., 25% off coupon) enhances consumers' post-promotion brand attitudes. This finding suggests that foodservice marketers could use sales promotion as a tool to strengthen consumers' brand attitude on the condition that the service quality is maintained during the promotional period.

The main focus of our study, however, was to explore the construct of gratitude and how it might influence post-promotion repeat purchase intent. We examined both consumers' grateful disposition and their gratitude toward sales promotion. Consumers' gratitude toward sales promotion was found to be a significant predictor of repeat purchase intent. Specifically, those who were more thankful when getting a good deal from the sales promotion demonstrated higher repeat purchase intent. To help marketers identify what type of consumer tends to have a higher gratitude toward sales promotion, we examined the correlation between several personality traits and gratitude

toward sales promotion. Interestingly, we found that consumers' spirituality, religiousness and agreeableness are positively related to their gratitude toward sales promotion. A further analysis indicated that female respondents were higher in agreeableness and subjects with Asian ethnicity were higher in religiousness. In sum, our study suggests that foodservice marketers might want to target their promotional efforts toward these market segments (i.e., females and religious groups).

The joint impact of restaurant type and consumers' grateful disposition on post-promotion repeat purchase intent were also examined. Our findings indicate that in the context of quick-service restaurants, respondents with a higher grateful disposition were most likely to return while those with a lower grateful disposition were least likely to return after the promotional period ended. These results suggest that consumers scoring low in grateful disposition might simply take the advantage of the price discount and fail to return without such incentive. This finding has important implications for quick-service restaurants. To increase the lifetime value of their customers, quick-service restaurants might need to employ sales promotion more strategically. For example, since our study shows that the personality trait of agreeableness is positively associated with grateful disposition, and that females tend to be higher in agreeableness, quick-service restaurant marketers could consider implementing special promotional package for this specific market segment.

Limitation and Future Research

This study involved college students as a sample. Important issues associated with this particular group are their lower purchasing power and higher price consciousness, which might affect their repeat purchase intent and their gratitude toward sales promotions. Future research, therefore, could obtain a larger sample with more diverse backgrounds. In this study, we examined the one time effect of sales promotions, and hence, the accumulative effects of repeated sales promotion on brand attitude were not considered. It would be interesting to know how the frequency of sales promotions influences brand attitude and gratitude towards sales promotions. In addition, we found that gratitude toward sales promotion is linked to religiousness. Yet, the degree of religiousness might vary across cultures. Hence, cross-cultural studies in this area are warranted.

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APPENDIX

Sales Promotion Scenario-Casual Dining Restaurant

The T.G.I. Friday's in town is celebrating its first anniversary. There is a special promotion for a period of 7 days. During this promotion period, customers can get a 25% discount for any purchase over \$30 by redeeming a coupon. You find a T.G.I. Friday's coupon in your mailbox and decide to use it. You and your friends order meals that are over \$30 and you use the coupon to obtain the 25% discount. The service is fast and friendly. Moreover, the dishes are well-prepared and delicious.

Sales Promotion Scenario-Quick Service Restaurant

The Subway in town is celebrating its first anniversary. There is a special promotion for a period of 7 days. During this promotion period, customers can get a 25% discount for any purchase over \$10 by redeeming a coupon. You find a Subway coupon in your mailbox and decide to use it. You purchase subs that are over \$10 and use the coupon to obtain the 25% discount. The service is fast and friendly. Moreover, the subs are fresh and tasty.

AMBIGUITY OF LOCUS ATTRIBUTION FOLLOWING SERVICE FAILURE IN FACILITATOR-BASED MULTIPLE SERVICE ORGANIZATIONS

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ABSTRACT

This study examines the impact of perceived locus attribution over service failures and failure severity on customers' evaluation in facilitator-based multiple service organizations (facilitators vs. service providers). Findings indicate that customers' evaluation (blame judgment, dissatisfaction, complaining intent, negative WOM) is more negative to facilitators than to service providers when they perceive ambiguous locus attribution. In addition, consumers are more dissatisfied when the customers perceive ambiguous locus attribution on the service failure, compared to when the customers perceive unambiguous locus attribution. Furthermore, high-participation customers (self-served customers) are strongly likely to attribute service failure to service providers than lower-participation customers using facilitators. Managerial implications of these findings are briefly discussed.

Key Words: ambiguity, blame attribution, service failure, facilitator services, service providers

INTRODUCTION

The diversity of the service sector makes it difficult to come up with managerially useful generalizations concerning marketing practice in service organizations (Maister & Lovelock, 1982). Lovelock (1983) argues for classifying services into specific categories that transcend narrow industry boundaries. In each instance, Lovelock (1983) offers insights into how the nature of the service might affect a marketing task. Accordingly, Maister and Lovelock (1982) examine *facilitator services* - a group of industries including stockbrokerage operations, real estate, and travel agencies - that facilitate the buying and selling of goods and services. Facilitator industries get involved not only in assembling the service bundle, but also in modifying the package and taking a position in the actual creation of the transaction services. For instance, travel agents primarily target their services at buyers of travel services, acting as a distributor for a large number of firms in the transportation and hospitality industries (Maister & Lovelock, 1982). Although facilitator services are dominant in the hospitality industry, there is little research in this service sector. Prime examples of facilitator services in the hospitality industry are travel agencies, wedding planners, and convention organizers that act as "middleman between customers and service providers such as hotels, airlines, and car rentals" as shown in Figure 1. A *service provider* is an entity that provides services to other entities which refers to a business that provides subscription to other businesses or individuals.

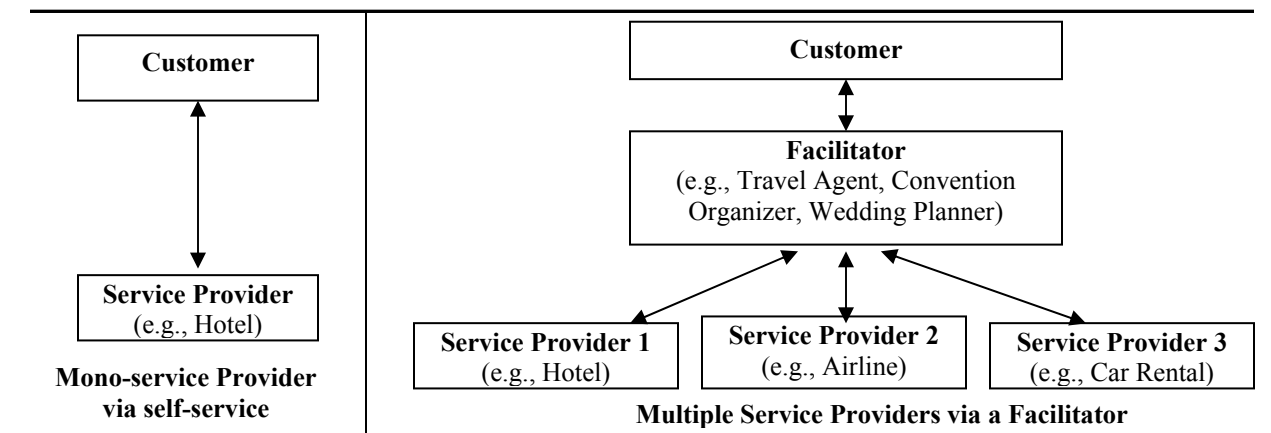
Most service failure studies have focused on one-to-one interaction, a single failure, and a mono-service provider, few study has explored customers' perception on a service failure within multiple service organizations. For instance, when a service failure occurs in a complex structure composed of a facilitator and a service provider as described in the examples below, the ambiguity of locus attribution, whether a facilitator or a service provider caused the service failure and who is to blame for the event, influences the aggrieved consumers' perceptions of both organizations. *The following are fictitious scenarios as an illustration.*

"June booked a European travel package from a travel agent in an Asian country. When June traveled in Europe, he realized that the train ticket was not reserved. Because of the language barriers, June could not determine whether the travel agent in his country of origin or the local train company caused the problem."

A series of services, provided by multiple service providers, are arranged by a facilitator that acts as a unique intermediary between customers and the service providers. However, once a service failure happens like in June's case, clarification of the blame attribution (who is at fault?) is the main key needed to correct the problem.

Yet, it is more difficult to find the locus attribution in the complex structure of facilitator-based services than it is in a direct customer-to-firm communication. Even when “who caused the service failure” in facilitated-based services is clearly exposed to the customers, the customers’ blame judgment on facilitators and service providers respectively would be different. The purpose of this study is to investigate the impact of perceived locus attribution over service failures and failure severity on customers’ evaluation in facilitator-based multiple service organizations (facilitators vs. service providers). This research addresses three broad research questions. First, how does ambiguous locus attribution within multiple service firms shape the customers evaluation of the firms? Second, how does the moderating role of failure severity influence relationship between locus attribution and evaluation of the firms? Third, how does the level of customers’ participation (high participation: self-service versus low participation: facilitator services) influence the consumers’ evaluation of the service providers? Thus, answering these questions could suggest the optimal managerial solution for the service failure for service firms in the hospitality industry and could also reveal the first steps for the next study on service recovery strategies.

Figure 1
Facilitator-based Multiple Service Setting



*Figure 1 is based on “Agent-based Multiservice Negotiation” (Merlat, 1999)

CONCEPTUAL FRAMEWORK and HYPOTHESES

The Effects of Ambiguity of Locus Attribution on Blame Judgment

A service failure is defined as service performance that falls below a customer’s expectation (Hoffman & Bateson, 1997). Following a service failure, customers engage in causal thinking to ascertain why the failure occurred (Weiner, 2000). In particular, the three attribution dimensions of locus (who caused the failure?), stability (is the failure likely to happen again?), and controllability (could the failure have been prevented?) have been empirically shown to influence consumers’ complaint intention, repurchase intentions, word-of-mouth behavior, redress preferences, and anger toward the firm (Folkes, 1984; Folkes, Koletsky, & Graham, 1987; Richens, 1983). *Locus*, as explicated by Weiner (1980), is the extent to which customers perceive causes of failures as an organization’s responsibility. Moreover, blame attribution has had a prominent role in research on service failures (Bitner, 1990; Folkes, 1984; Folkes et al, 1987). My primary interest is a locus ambiguity between organizations. The locus attribution between facilitators and service providers will be the conceptual model in this study because of its potential role in determining the customer’s blame judgment following service failure.

Then again, damage to the firm can even occur when the firm’s fault is ambiguous, i.e., in a situation where information is unclear as to whether the company is at fault (Laufer, Gillespie, McBride, & Gonzalez, 2005). An ambiguity can be particularly apparent early in a product-harm crisis. A number of studies suggest that consumer segments such as societies, individualism and collectivism (Laufer, 2002), age groups, young and old (Laufer, 2005), and gender, men and women (Laufer & Gillespie, 2004), assess blame for firms differently in a product-harm crisis. A foremost example of ambiguous blame attribution by a product failure is the case of the Firestone tires recall. The vehicle accidents that occurred, especially in Ford SUVs fitted with Firestone tires, led to 203 deaths, over 700 injuries and 6000 complaints (Yancho, 2001). Patrick and Folkes (2002) investigated consumers’ perceptions of blame in the Firestone tires recall. The extent to which knowledge about Ford’s or Firestone’s role in the recall was

accessible to consumers had a greater effect on blame for Ford - the company indirectly involved in the recall - than on Firestone although the Firestone tires were the main source of danger to consumers. Then, how does ambiguous blame attribution following a service failure, compared to a product failure, affect consumers' blame judgment?

Ambiguity occurs when there is "no clear interpretation of a phenomenon or set of events (Feldman, 1991)." Accordingly, ambiguous situations are characterized by a lack of sufficient information that can be illustrated in three context: (a) a completely new situation in which there are no familiar cues, (b) a complex situation in which there are a great number of cues to be taken into account, and (c) a contradictory situation in which different elements or cues suggest different structures - in short, situations characterized by novelty, complexity, or insolubility (Budner, p. 30). Ambiguity exists in a dissatisfying purchase occasion when the information available to consumers is insufficient or unclear (Stephens & Gwinner, 1998). Ambiguity is likely to intensify threat appraisals because it lessens people's sense of control and increases their sense of helplessness (Lazarus, 1966). The greater the ambiguity is in a situation, the more consumers will rely on personal factors (e.g., beliefs, commitments) for their cognitive appraisal (Lazarus & Folkman, 1984).

Even though the consumers' blame judgment influenced by ambiguous locus attribution following a service failure is not the same as that in a product failure, perceptions may be fairly straightforward for a facilitator's fault in a service failure. The judgments of facilitator's blameworthiness seem rather simple to make because a facilitator is a direct contact party for the arrangement of service providers. Conversely, service providers do not directly organize services even though the extent of customer contact by service providers is much higher than that by facilitators. In such cases, consumers may arrive at blame judgments through more complex inferences for service providers. In addition, the research on blame attributions suggests that the perception of blame is closely linked to the perceived degree of control and intent of the entities involved (Shaver, 1985). For example, blame judgments about service providers following a service failure seem to be more difficult because of the many different facets of their relationship with facilitators that can lead to varying inferences about intentionality and controllability. Consequently, customers perceiving ambiguous locus attribution might attribute more blame to directly involved firms (facilitators) than indirectly linked firms (service providers). As such, I offer the hypothesis:

Hypothesis 1: Following a service failure, customers perceiving ambiguous locus attribution will rate negative evaluation (blame judgment, dissatisfaction, complaining intent, negative WOM) of facilitators higher than those of service providers.

The Influence of Failure Severity on Overall Dissatisfaction

Consumer evaluation decline as service failures become more severe (Smith, Bolton, & Wagner, 1999). Additionally, service failures can vary in severity, the magnitude of loss that customers experience (Hart, Heskett & Sasser, 1990). Service *failure severity* refers to a customer's perceived intensity of the problem. The more intense or severe the service failure, the greater the customer's perceived loss. Perceptions of severity are in turn affected by the customer's tolerance for ambiguity - the lower the tolerance for ambiguity, the higher the perception of the severity (Laufer, Gillespie, McBride, & Gonzalez, 2005). Zeithaml, Berry, and Parasuraman (1993) suggest that customers' zone of tolerance for service failure varies depending on the situation. The findings from defensive attribution hypothesis studies in psychology have important implications in marketing contexts where service failure can also vary in terms of severity. The *defensive attribution* hypothesis posits that when an incident results in a more severe outcome, more blame will be attributed to a potentially responsible party than by an observer to the incident (Shaver, 1970). Fiske and Taylor (1991) describe the impact of the perceived severity of outcomes and blame attribution as follows: "As the consequences of an action become more severe, they become more unpleasant, and the notion that they might be accidental becomes less tolerable." The defensive attribution hypothesis has been examined quite extensively in psychology literature and two meta-analyses have found a significant positive relationship between the severity of negative outcomes on measures of responsibility and blame (Robbennolt, 2000; Burger, 1981). Additionally, the relationship between blame attribution and severity of outcome may be mediated by the dimension of situational ambiguity-structures (Phares & Wilson, 1972). They found that under ambiguous conditions there is virtually no relationship between responsibility attribution and severity of outcome. In other words, severe outcome would seem to lead to greater blame attribution when situations are highly structured (the connection between person and outcome is very direct) but not when situation are ambiguous (the connection between person and outcome is not very clear). As a result, severe outcome would seem to lead to greater blame when attribution to the firm in service failure is very direct and clear, but the interaction occurs in only severe

outcome cases but not with mild cases. As the service problem become more severe, the customers' tolerance zone gets narrower, thus increasing the potential for customer dissatisfaction (Hoffman et al., 1995). Based on the above, I hypothesize that:

Hypothesis 2: Failure severity will have a greater effect on overall dissatisfaction under condition of ambiguous locus attribution compared to conditions of unambiguous locus attribution (attribution to facilitators or service providers).

Behavioral Reaction: Complaining Intent, Negative Word-of-Mouth

Consumer attributions of blame toward marketers can influence the dissatisfaction outcome. Logic predicts, and previous research has shown, that the greater the severity of a service failure, the more angry and dissatisfied the customer is with the organization (Folkes, 1984; Folkes et al., 1987). Dissatisfaction is a customer's affective psychological response based on subjective evaluations of service performance (Oliver, 1980). Richins (1983) also found that the greater the degree of blame attributed to the company for product failure, the more consumers complains. Hence, consumers may perceive complaining as a way of castigating an organization but they may also view it as a way of encouraging problem solving efforts. In addition, more severe service failures should increase the likelihood of negative word-of-mouth due to the strong negative emotions associated with severe service failures (Richins, 1987). In this study, two principle outcomes of service failure encounters will be investigated. Theses outcomes include evaluative outcomes and behavioral outcomes. The evaluative outcome of the service failure encounter is blame judgment and overall dissatisfaction. The behavioral outcome includes complaining intent and negative word-of-mouth. The conceptual framework is developed based on literature review above as shown in Figure 2.

Consumers' Blame Judgment on Service Providers: Self-Service versus Facilitator Service

Travel agents booked more than 95 percent of cruises, 90 percent of airline tickets, 50 percent of car rentals and 25 percent of all hotel rooms (Schulz, 1994), but the ultimate impact of the combined computer and communications revolution may be to enable buyers and sellers to search for each other by direct access to a computer-based market file (Emmer, Tauck, Wilkinson, & Moore, 2003). The self-service and intermediary role of the facilitator services coexist and the comparison of consumers' blame on a service provider and clarification of how a consumer's level of participation influence the consumer's blame on the firm are necessary. It is generally accepted that individuals tend to attribute successful outcomes to themselves and unsuccessful outcomes to external forces. Marketing literature has shown strong support for a *self-serving bias* in a decision making context (Curren, Folkes, & Steckel, 1992). Of interest in this study is whether a self-serving bias has an impact on blame attributions in the context of service failure when the customer has played an active role in the service delivery. That is, will *consumers' level of participation* influence the degree to which they blame themselves, as opposed to the firm, following a service failure? To increase the probability for a more satisfying service experience and perhaps reduce the risk associated with transaction (i.e., consumers have more control over the service encounter when they are participative), high-participation customers incur both monetary and non-monetary costs (Rosander, 1985; Lovelock, 1994; Youndahl & Kellogg, 1997).

High participation means high "costs" for the participants. Exchanges are thought to be fair or just when the outcomes received from the exchange are proportional to the inputs (Messick & Cook, 1983). The high level of the inequity caused by the discrepancy between the consumer's high inputs and the firm's failure will result in a desire to protect one's self-esteem (Walster, Berscheid, & Walster, 1973). More specifically, rather than blaming themselves, thus acknowledging that their own inputs were inadequate, high-participation customers may assign blame to the firm. Customer participation has been defined as "the degree to which the customer is involved in producing and delivering the service" (Meuter & Bitner, 1998). Self-service contexts will interact with the level of participation because the consumer plays a major, active part in the successful delivery of the service. If a consumer's participation is low, by the third party's choice (e.g., travel agent's choice), they effectively forfeit the legitimacy of their right to blame the organization for the service failure. For example, when a customer discovers that a room has not been reserved as requested, the customer who reserved the room online will be more likely to attribute blame to the hotel than the customer who reserved the room through a travel agent. Thus, I propose the following:

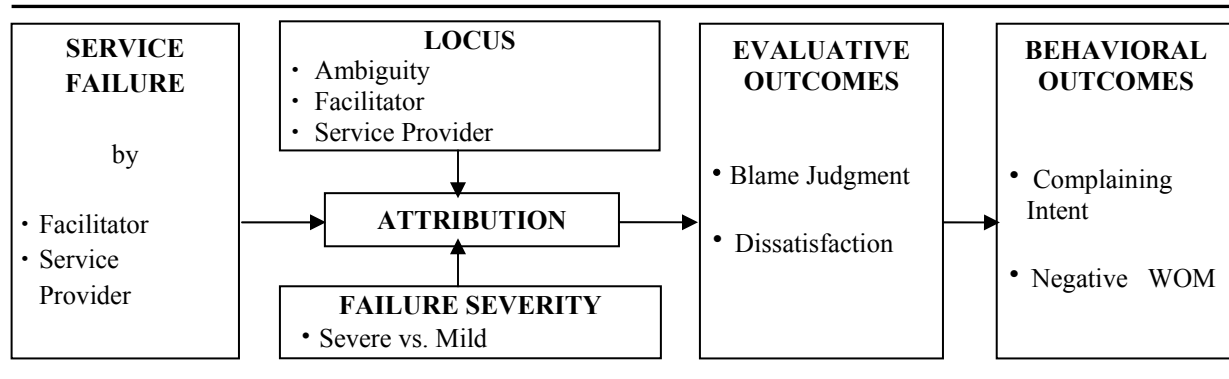
Hypothesis 3: High-participation customers (self-served customers) are more likely to attribute service failure to service providers than lower-participation customers (using facilitators).

METHOD

Research Design

This study adopted a between-subjects experimental design using written scenarios as stimulus materials. Experimental scenarios have proved valuable past studies of reactions to service failures and/ or recovery processes (Smith & Bolton, 1998). The experiment employed a 2 x 3 full-factorial between-groups design, with locus attribution and failure severity manipulated. Multi-item measures of blame judgment, overall dissatisfaction, complaining intent, and negative worth-of-mouth were developed as dependent variables. The details of the scenario are shown in Appendix A. Eventually, two independent variables will be manipulated: locus attribution and failure severity. A three (Locus: ambiguity, facilitator, and service provider) x two (Severity: severe vs. mild) factorial, between subject designs will be employed to test the hypothesis. The first scenario of self-served reservation failure will be identical in six conditions. The conceptual framework is developed based on literature review above as shown in Figure 2.

Figure 2
A Conceptual Framework



Participants and Procedure

The questionnaire was also administered via a survey to the 120 college students on a random allocation basis. Fifty-seven percent of these participants were male. The average age of the participants was 21 years. Six versions of stimuli would be created through the presence or absence of attribution information and different levels of failure severity. Independent variables are locus attribution and failure severity and dependent variables are blame judgment, overall dissatisfaction, complaining intent, and negative word-of-mouth.

Measurement Variables

Independent variables

Locus Attribution. Ambiguity of locus attribution will be measured on a 7-point scale with a single-item measure.

“Based on all the information you’ve read, what extent did you perceive the travel agent/ hotel’s fault for the problem exposed?” (1=completely ambiguous, 7=clearly perceived).

Failure Severity. Failure severity will be measured on a 7-point scale with a single-item. “In my opinion, the reservation problem that they experienced was a” (1=minor problem, 7=major problem). The scale was adapted from Maxham and Netemeyer (2002: 3 items).

Dependent variables

Blame Judgment. Participants will be asked to rate “To what extent to do you blame the travel agent/ hotel for this problem?” with a 7-point Likert-type scale (1=none at all, 7=all the blame). The scale was adapted from Maxham and Netemeyer (2002: 3 items).

Overall Dissatisfaction. Overall Dissatisfaction will be measured via six items. The scale includes items such as “I feel extremely dissatisfied with the travel agent/ hotel.” with a 7-point Likert-type scale (1= strongly disagree, 7= strongly agree). The scale was adapted from Oliver and Swan (1989: 6 items).

Complaining Intent. Participants will be asked to rate “I would complain to the travel agent/ hotel about the service failure” with a 7-point Likert-type scale (1= strongly disagree, 7= strongly agree). The scale was adapted from Swan and Oliver (1989: 3 items).

Negative Word-of-Mouth Negative word-of-mouth will be measured via three items. The scale includes items such as “I would say negative things about the travel agent/ hotel to other people.” with a 7-point Likert-type scale (1= strongly disagree, 7= strongly agree). The scale was adapted from Zeithaml, Berry and Parasuraman (1989; 4 items).

RESULTS

Manipulation Check

To check whether locus manipulations worked, we asked participants to rate the extent to which they agreed with the two following statements: “What extent did you perceive the travel agent to be at fault for the problem?” and identical question with “What extent did you perceive the hotel to be at fault for the problem?” A seven-point Likert scale was used with 1 being “completely ambiguous” and 7 being “clearly perceived.” Participants in the facilitator attribution condition report higher fault perception on the facilitator (travel agent) compared to the service provider (hotel) attribution condition (facilitator = 6.03, service provider = 4.13; $F(2, 117) = 13.71, p < .001$). Participants in the service provider attribution condition report higher fault perception on the service provider (hotel) compared to facilitator attribution condition (service provider = 5.75, facilitator = 2.53; $F(2, 117) = 44.44, p < .001$). To check the manipulation regarding service severity, we used the statement: “In my opinion, the reservation problem that they experienced was a “minor problem (1)/ major problem (7), small inconvenience (1)/big inconvenience (7), minor aggravation (1)/minor aggravation (7)” The failure severity manipulation check is also significant (severe = 6.42, mild = 4.99; $F(1, 117) = 54.63, p < .001$). Regarding realism, study participants perceived the scenario descriptions as realistic ($M = 6.09$, no differences between the conditions). No other significant main effects or interactions were found. Therefore, the failure manipulation by the scenarios was effective.

Test of Hypotheses

As predicted in H1, customers perceiving ambiguous locus attribution attribute more to facilitators than service providers; (facilitator=5.33, service provider = 4.13) and rate overall negative evaluation of facilitators higher than those of service providers as shown in Table 1. Therefore, H1 is supported.

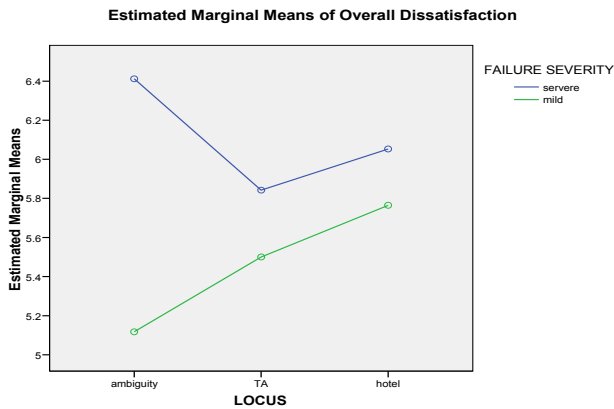
Table 1
Paired Samples Statistics in Ambiguous Locus Attribution

H1: Ambiguous Locus Attribution (N=40)				Facilitator (N=40)			Service Provider (N=40)		
Dependent Variables	Facilitator (TA)	Service Providers (Hotel)	Mean Difference	F (TA)	SP (Hotel)	M.D	F (TA)	SP (Hotel)	M.D
Blame Judgment (%)	64.44 (3.42)	35.56 (3.42)	-28.87**	89.00 (2.38)	11.00 (2.38)	-78.00**	29.77 (3.06)	70.23 (3.06)	-40.46**
Blame Judgment	5.33 (.18)	4.13 (.23)	-1.20**	6.33 (.13)	2.56 (.24)	-3.76**	3.85 (.13)	5.94 (.24)	-2.09**
Dissatisfaction	5.68 (.16)	4.71 (.23)	-1.00**	6.39 (.14)	3.07 (.28)	-3.32**	4.12 (.14)	5.70 (.28)	-1.58**
Complaining Intent	6.17 (.14)	5.51 (.20)	-0.66**	6.28 (.16)	4.41 (.27)	-1.87**	5.75 (.16)	6.00 (.27)	-0.25
Negative WOM	5.38 (.19)	4.14 (.27)	-1.24**	5.94 (.18)	2.58 (.25)	-3.36**	3.73 (.18)	5.01 (.25)	-1.28**

* $p < .05$, ** $p < .01$

The ANOVA results for overall dissatisfaction with a service failure revealed a significant main effect for failure severity (severe = 6.10, mild = 5.46, $F(1, 119) = 13.87, p < .001$), while the main effect for perceived locus was not significant ($F(2, 119) = 0.1, NS$). This main effect is qualified by the marginally significant interaction effects ($F(2, 119) = 2.20, p < .1$; see fig. 3). Figure 3 shows that failure severity has a greater effect on overall dissatisfaction under condition of ambiguous locus attribution compared to conditions of unambiguous blame. Therefore, H2 is marginally supported. As predicted in H3, high-participation customers (self-served customers) are more likely to attribute service failure to service providers than lower-participation customers using facilitators; (facilitator=69.84, service provider = 90.32) as shown in Table 2. Therefore, H3 is supported.

Figure 3
Estimated marginal means of overall dissatisfaction by locus condition



**Table 2. Paired Samples Statistics
in Service Provider Attribution Condition**

H3: In Service Provider Attribution Condition (N=40), EVALUATION ON S.P.			
Dependent Variables	Facilitator Service	Self-Service	Mean Difference
Blame Judgment (%)	69.84 (2.01)	90.32 (3.14)	-20.49**
Dissatisfaction	5.68 (.16)	5.91 (.18)	-.23
Complaining Intent	6.00 (.20)	6.35 (.13)	-.35
Negative WOM	4.99 (.24)	5.53 (.25)	-.53*

CONCLUSION & DISCUSSION

The study's findings show that customers' perceptions of a locus attribution over a service failure influence their reaction after the incident. When customers perceived that the locus attribution is ambiguous, their blame judgments on the facilitators (travel agents) were highly negative compared to that on the service providers (hotels). In other words, consumers are more likely to blame the travel agents than hotels under the ambiguous conditions of locus attribution following service failure. These results are congruent with prior studies showing that locus attributions influence consumer perceptions of service failure incidents. Finally, our results also indicate that failure severity has a greater effect on overall dissatisfaction under condition of ambiguous locus attribution compared to conditions of unambiguous blame. The purpose of the study is to examine customers' locus perceptions of a service failure by multiple service organizations. Our experiments will suggest that service failure elicits blame not only for the firm that facilitates the service, but also for the organization that delivers the service. Hence, firms need to be vigilant about the services that they distribute or incorporate into their own services. Further, concern about consumers' exposure to negative information will also be justified. The study show that merely making service provider's attribution to the service failure accessible will be sufficient to elicit more negative responses from consumers on service providers. In facilitator-based services, there are major and minor players. While, most often, there is no escaping blame or a damaged reputation for the major player, very little attention has been paid to the consequences of involvement for the minor player, the service provider. Our research is perhaps the first that provides interesting insights for a service failure by involvement of the minor player. This study suggest that actions taken by the corporation to reduce the accessibility of the minor's blameworthiness (e.g., not telling a minor player's fault to customers) might help a firm in the short run. However, if customers are exposed to the information by a third party (e.g., later a facilitator told customers that a service provider caused the problem), lack of disclosure may eventually backfire, thereby implicating service providers even further.

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CONSUMERS' PREPURCHASE UNCERTAINTY AND INFORMATION SEARCH IN ONLINE HOTEL BOOKING CHANNEL

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ABSTRACT

This research examines two types of consumer pre-purchase uncertainty: knowledge uncertainty and choice uncertainty, and the relationship between uncertainty dimensions and the degree of consumer external information search in online hotel booking environment. The study was designed as a two (high/low knowledge uncertainty) by two (high/low choice uncertainty) between-subjects factorial experiment ($N=107$), and a multivariate analysis of covariance (MANCOVA) suggests that each uncertainty distinctively affects consumer pre-purchase information search behavior. The study discusses the findings in light of economics of information theory and psychological aspects of information search. Managerial implications are also discussed.

Key Words: prepurchase information search, knowledge uncertainty, choice uncertainty, economics of information theory

INTRODUCTION

In a dynamic decision environment, pre-purchase search is perceived as consumers' routinized behavior to acquire the latest product information prior to purchase. Travelers' pre-trip information search has been an active topic in an empirical and academic viewpoint. Tourism information acquisition is required to choose a destination and plan a trip with onsite decisions such as selecting accommodations, transportation, activities and tours (Fodness & Murray, 1998). Despite various antecedents of information search, uncertainty is widely perceived as the strongest driving forces behind consumer pre-purchase search, through which consumers reduce uncertainty about a product and guide themselves to reach a terminal decision (Susskind et al., 2003). Recent research has investigated the relationship between uncertainty-relevant constructs and information search (e.g., Gursoy & McCleary, 2004). Several researchers, however, have called the relationship into question and have produced inconsistent findings. Such results may arise from both the complexity of uncertainty as a construct and a shortcoming of the questionnaire research method employed in several previous studies. The primary purpose of this study is to examine the structural relationship between travel consumers' multidimensional pre-purchase uncertainty and their information search behavior in an online hotel booking environment by avoiding the compounding effect of the complexity of uncertainty. In this study, consumers' pre-purchase uncertainty was identified as a two-dimensional construct: knowledge uncertainty and choice uncertainty (Urbany et al., 1989). Hypotheses were developed from the literature and tested by conducting an experiment that independently manipulates the two types of uncertainty. Results and implications are discussed.

LITERATURE REVIEW

Consumer Information Search

Internal vs. External Search

In consumer behavior research, a buyer's information search for purchase decisions has been categorized into two types of search: internal search and external search. Internal search refers to the acquisition of information stored in the long-term memory such as past experience and previous information searches (Money & Crotts, 2003). External information search refers to information acquisition from a variety of external sources other than memory, such as consulting with salespeople, reading and looking at ads, direct observation and so on. It is undertaken to gather additional information when internal search proves inadequate or is not up-to-date (Gursoy & Umbreit, 2004).

Several researchers categorized external information search into two types of search: ongoing search and pre-purchase search activity (e.g., Blackwell et al., 2001). Ongoing search is described as an information search activity motivated by both desires to update product knowledge for future purchase decision and enjoyment of shopping or search activity (Bloch & Richins, 1983). Pre-purchase search primarily results from desires to make better consumption choices. Therefore, consumers make their cognitive effort for pre-purchase search to reduce uncertainty for specific purchases. Since this type of search pertains to an upcoming purchase decision, most research on information search has focused on pre-purchase search. In this research, we also focus on consumers' pre-purchase search behavior.

Measurement of External Search Used in the Information Search Literature

Measures of external search have generally reflected a concept of external search proposed by Beatty and Smith (1987): "External search is the degree of attention, perception, and effort directed toward obtaining environmental data or information related to the specific purchase under consideration" (p. 85). Engel, Blackwell, and Miniard (1995) characterized consumer search according to three main dimensions: degree of search, direction of search, and sequence of search. Degree of search pertains to the amount of search such as the number of brands and product attributes considered and the amount of time spent on the purchase decision. Direction of search is focused on contents searched about a product prior to purchase. Sequence of search is referred to as the order that stores, brands, product attributes are examined. Ozanne et al. (1992) conceptualized the degree in two different search components: breadth and depth. They defined search breadth as the number of different attributes acquired, while search depth referred to the amount of search effort consumers make to each attribute. A majority of studies examining consumer's external search have heavily relied on degree of search. However, identifying consumers' extensive information search behavior by multiple perspectives may produce an integral viewpoint combining consumers' information search behavior with their buying behavior in a complex purchase and choice environment. Therefore, this research uses three sets of dependent measures of external search: degree of external search, breadth of information searched, and depth of information searched.

Online Information Search

Travelers' online information search presents a continuum of selections of products and suppliers through comparisons of product attributes, prices, availability, and alternatives. As compared to other traditional sources, online information search directly leads travelers to purchasing since travel commercial websites as a distribution channel simultaneously offer reservation and purchase-related information (Jang, 2004). In addition, using the Internet provides travelers with several benefits: accessing abundant information without restriction of time and space; screening unwanted information and taking only relevant information; obtaining relatively transparent information sources. Hence, consumers using the Internet can make easy and rational product comparisons, thereby improving the overall productivity of their purchase process. As a result, online information search is believed to reduce search costs and increase benefits for consumers using the Internet. According to the economics of information theory (see Stigler's 1961), these cost-effective and beneficial features of the Internet are supposed to lead consumers to more information search online. However, recent empirical studies show a counter finding that consumers undertook a relatively low search activity online (e.g., Jansen et al., 2000). Therefore, online information search does not guarantee the increase of the amount of consumer information search. Apparently, this study needs to identify whether the theory of economics of information is well applied to an online search environment.

Consumer Information Search and Two Dimensions of Prepurchase Uncertainty Uncertainty in the Information Search

The relationship between uncertainty and information search has been eagerly studied by researchers in many different disciplines. In tourism and travel research, travelers' information search behavior and uncertainty prior to trips has also been an active topic from empirical and academic point of view. Recent research has investigated the relationship between travelers' prior knowledge as either a multidimensional construct composed of expertise and familiarity or unidimensional uncertainty-relevant construct and information search behavior (Kerstetter & Cho, 2004; Lehto et al., 2006). However, numerous relevant literatures show that the findings are contradictory. The inconsistent findings may have resulted from the following reasons. First, the type of decision-related uncertainty may be various and complex. Second, the self-reported measurements of uncertainty were mostly employed. Recalling may not be an appropriate way to reflect one's psychological status in the past experience. Urbany et al.'s (1989) study suggested some ideas to deal with the presumed problems mentioned above. The study classified uncertainty into two dimensions: knowledge uncertainty (i.e. what is known about the alternatives) and

choice uncertainty (i.e. which alternative to choose). In addition, contrary to other previous and post studies about uncertainty, it measured subjects' uncertainty related to all alternatives in a consumer's choice set. They also emphasized the necessity of experimental approach to establish and test the explicit causality between uncertainty and information search. Therefore, on the basis of Urbany et al.'s (1989) study, our study aims to examine the relationship between travelers' uncertainty and their information search behavior, categorizing two dimensions of uncertainty about selection of a product and measuring the real-time uncertainty through the experimental design.

Knowledge Uncertainty and Information Search

Knowledge uncertainty is "uncertainty regarding what is known about alternatives" (Urbany et al., 1989, p. 208) and refers to as the extent to which consumers are sure of their competence to evaluate retailers and products well enough to make rational product comparisons. Urbany et al. (1989) argued that knowledge uncertainty indicates confidence in consumer's knowledge about product features, the usefulness of such features, and his/her ability to make a good purchase choice. Knowledge uncertainty may result from insufficient information about other choices, doubt about which decision rules are pertinent and/or how to obtain the information required in making decision (Urbany et al., 1989). Thus, consumers with knowledge uncertainty may not know which alternatives exist and what different alternatives' attributes are available. Moreover, they may not know what value criteria are considered crucial and, therefore, may not be sure of choice rules used in their decision making. Urbany et al. (1989) found that consumers' knowledge uncertainty is negatively related to their information search. They supported the finding by introducing aspects of search cost and prior knowledge or expertise. That is, consumers in high knowledge uncertainty undertake less search efforts due to perceived high costs of search. As a result, increasing perceived costs of search lead to reducing consumer's motivation to search further (Bettman, 1979). Consistent with their key findings and the supportive explanation behind them, we propose hypotheses pertaining to travel consumers' information search efforts based upon their level of knowledge uncertainty:

H1a: Higher (versus lower) levels of knowledge uncertainty (H-KU) will lead to travel consumers spending less time searching decision-related information through the Internet until they decide to purchase a travel product.

H1b: Higher (versus lower) levels of knowledge uncertainty (H-KU) will result in travel consumer visiting a fewer number of Websites per hotel (lower levels of consumer search depth using the Internet).

H1c: Higher (versus lower) levels of knowledge uncertainty (H-KU) will result in travel consumer visiting a fewer number of hotels on the Webpage⁵ (lower levels of consumer search breadth using the Internet).

H1d: Higher (versus lower) levels of knowledge uncertainty (H-KU) will result in travel consumer visiting a fewer number of Websites (lower levels of consumer total amount of search using the Internet).

Choice Uncertainty and Information Search

Urbany et al. (1989) claimed that choice uncertainty pertains to which alternative from a consideration set to choose. A variety of reasons for the occurrence of choice uncertainty have been discussed. Urbany et al. (1989) asserted that it may result from either "a high level of ignorance about the product" or "the marketplace or a relatively well-informed base of knowledge that suggests that there may be yet undiscovered alternatives" (p. 214). Fisher et al. (2000) agreed with those reasons and also defended that choice uncertainty may be caused by perceived unfamiliarity with the alternatives or "lack of familiarity with the preference-revealing mechanism" (p. 90). In addition, some alternatives may be more difficult to evaluate than others, thus leading to greater uncertainty regarding the value of the alternative during the process of developing an evaluative rating. This type of uncertainty dimension appears to be closely related to consumer's information search behavior. Sieber and Lanzetta (1964) argued that decision makers normally involved with several activities such as acquisition of more information and reorganization of known information for reducing uncertainty about selection and response conflict. Urbany et al. (1989) discussed that choice uncertainty led to consumer's extensive search, especially, when choice of the best alternative is equivocal, since this type of uncertainty results in conflict and, subsequently, stimulates consumers to deal with that conflict. Even though consumers know many alternatives, they might be confused, because they are uncertain about which alternatives will give them better value or benefit. They also discussed "how the characteristics of a choice set contribute to choice uncertainty" (p. 214). In other words, consumers' level of choice uncertainty would be determined by whether consumers perceive choice alternatives as equivalent or unequivalent. Scholars based on a cost-benefit model in economics discipline predict that the similarity between choice

⁵ It refers to a webpage like Expedia.com or Travelocity, which shows several hotels belonging to his/her preference category.

alternatives causes a less search due to lower expected benefits from search and low choice uncertainty (Stigler, 1961). However, psychologists argue that more extensive search will be undertaken when available options in a choice set are similar due to the high choice uncertainty (Lanzetta, 1963). Therefore, we propose the following hypotheses.

H2a: Higher levels of choice uncertainty (H-CU) will lead to travel consumers spending more time searching decision-related information through the Internet until they decide to purchase a travel product.

H2b: Higher levels of choice uncertainty (H-CU) will result in travel consumer visiting a more number of Websites per hotel (higher levels of consumer search depth using the Internet).

H2c: Higher levels of choice uncertainty (H-CU) will result in travel consumer visiting a more number of hotels on the Webpage (higher levels of consumer search breadth using the Internet).

H2d: Higher levels of choice uncertainty (H-CU) will result in travel consumer visiting a more number of Websites (higher levels of consumer total amount of search using the Internet).

METHOD

All student participants ($N=107$) in a 2 (High/Low Knowledge Uncertainty) by 2 (High/Low Choice Uncertainty) between-subjects experiment were randomly assigned to one of four experimental conditions. Four different hotel booking web pages were constructed for use as stimulus materials in the experiment. There were eight hotels available per page, each hotel that is accompanied by four hyperlinks for full hotel information, consumer reviews, additional images, and other agencies. Amount of information and length of content were equivalently assigned to each of four web pages, thereby avoiding their effects on participants' information search effort and behavior.

Experimental treatment conditions

Each online hotel booking web page represents one of four conditions. Brand vs. non-brand hotel and similarity and differentiation of consumer evaluations about hotels were employed for manipulating of each uncertainty dimension. Two hotel booking web pages reflecting low knowledge uncertainty were tailored to include eight brand hotels, while the other two hotel booking web pages describing high knowledge uncertainty were tailored to include eight non-national brand hotels. As for the levels of choice uncertainty, two hotel booking web pages indicating high choice uncertainty were purposely tailored to illustrate equivalent evaluations about all available alternatives. On the contrary, the other two web pages demonstrating low choice uncertainty displayed an outstanding quality and evaluation of one hotel and relatively lower qualities and evaluations of other seven hotels. Since hotel room rates play a decisive role for consumers' choice, the price was controlled to be the same.

Searching task

All participants were given the exact same searching task with a scenario: "Imagine that you and your boy/girl friend are about to plan a trip to San Francisco. You are the one who chooses a hotel for stay in San Francisco. And there are eight hotels available in a hotel booking web page whose price ranges are exactly close to your budget for accommodation. In order to select a hotel among all alternatives, you are looking for information about hotels that is available in the hotel booking web page". To complete the task, participants explored information pertaining to the searching task by navigating available information within the web page. Participants were asked to keep searching until they found enough information for choosing a hotel.

Dependent variables

The primary dependent variables considered in this study were the amount of time spent on the purchase decision, search depth, search breadth, and total search. First, the amount of time spent on the purchase decision information was measured by Wrapper⁶ that kept tracking participants' information search activities from the start to the end of browsing the web page for their purchase decision. Depth of search referred to how many hyperlinks per hotel participants went into, while the breadth of search was measured by the total number of hotels examined. The total search was captured by the total amount of web pages searched. The measures of all dependent variables were precisely performed based on log files created by Wrapper.

⁶ Wrapper is a freeware tool that enables tracking of users' interactions with the browser. It produces a log file that records web page addresses visited and visiting time.

Manipulation checks

The effectiveness of our manipulation was checked by the two measures. One was to identify participants' knowledge uncertainty about hotels available by asking the questions such as how confident they feel about quality and performance of hotels and how knowledgeable they are about the features and brands of hotels on a scale of one to seven, with one being not at all and seven being very strongly. The other was to check how sure participants were of their purchase decision process: choice uncertainty. It was measured by asking the questions such as how much participants are sure of which hotel among all alternatives to choose and how easily participants can compare one hotel to another for their choice. Measurement items were either adapted from Wang et al's (2007) and Urbany et al's (1989) study.

Control variable

Brand loyalty has been considered a strong factor influencing a consumer's choice and purchase decision because it arises from consumers' perception of right product features, images, or level of quality at the right price that are offered by a certain brand (Giddens & Hofmann, 2002). Once consumers establish brand loyalty, they are willing to search for their favorite brand and are less sensitive to competitive promotions. In this sense, it might affect consumers' choice uncertainty and their information search behavior. In order to measure brand loyalty, six measurement items were directly adapted from the Kim et al's (2003) study.

Procedure

The experiment required approximately one hour to complete and was conducted in a campus computer laboratory. At the first stage of the experiment, participants were asked to look carefully at a randomly assigned hotel booking web page on his/her computer screen. After examining the web page, participants were asked manipulation check questions. Afterward, experimenters distributed the description of the searching task and instructions about the searching task. Participants, then, started searching information based upon their searching task. On completing the searching task, they were asked several questions pertaining to participant's searching task and process. After completing the final questionnaire about demographic information and internet experience, participants were asked to save the electronic version questionnaire and the log file on the computer desktop. Then, they were thanked for their participation and allowed to leave.

Preparation for data analysis

As preparation for data analysis, a data screening process was performed. Out of one hundred seven sample data, sixteen were excluded because they were either outliers or incomplete. Therefore, ninety one surveys were utilized for this study. Afterwards, reliability tests were performed for the measurement of manipulation check items and control variable. The items for both knowledge and choice uncertainty respectively showed a high degree of internal consistency (Cronbach's $\alpha = 0.96$ and $\alpha = 0.98$). The measurement items for consumers' brand loyalty also showed a high degree of reliability (Cronbach's $\alpha = 0.78$).

RESULTS

Manipulation checks

To test the efficacy of the two dimensions of uncertainty, a couple of two-way analysis of variance (ANOVA) were run with knowledge uncertainty and choice uncertainty as independent factors and the perceived knowledge or choice uncertainty index as each dependent variable. The effect of knowledge uncertainty was significant, $F(1,87) = 1054.50, p < .001, \eta_p^2 = .924$, with perceived knowledge uncertainty scores (the lower the scores, the more uncertain consumers are) lower for the higher knowledge uncertainty condition ($M=1.67, SD=0.67$) than for the lower knowledge uncertainty condition ($M=6.09, SD=0.79$). Significance was found for the main effect for choice uncertainty, $F(1,87) = 513.58, p < .001, \eta_p^2 = .855$, with perceived choice uncertainty scores lower for the higher choice uncertainty condition ($M=1.90, SD=0.89$) than for the lower choice uncertainty condition ($M=6.03, SD=0.94$). In summary, both manipulations were successful.

Multivariate results

A two-way multivariate analysis of covariance (MANCOVA) was run with knowledge uncertainty and choice uncertainty as independent factors while controlling for brand loyalty. Dependent variables were the amount of time spent on purchase decision, depth of search, breadth of search, and total amount of search. The omnibus

MANCOVA results indicated significant main effects of knowledge uncertainty (Wilks' $\Lambda = .26$, $F(4,83)=57.95$, $p < .001$, $\eta_p^2 = .74$), choice uncertainty (Wilks' $\Lambda = .19$, $F(4,83)=87.78$, $p < .001$, $\eta_p^2 = .81$), and the significant interaction effect between knowledge and choice uncertainty (Wilks' $\Lambda = .24$, $F(4,83)=65.95$, $p < .001$, $\eta_p^2 = .76$).

As for a covariate, brand loyalty did not significantly influence the combined dependent variables. These MANCOVA results informed subsequent univariate analyses by suggesting that significant univariate effects of knowledge uncertainty and choice uncertainty factor and significant interaction effect were not likely artifacts of alpha inflation. Univariate analysis of covariance (ANCOVA) tests on each dependent variable followed, with one covariate included. In addition, corresponding ANOVA tests were run on each dependent variable without the covariate to check whether significance of test results was consistent without the covariate. Where these supplemental ANOVA tests produced identical results regarding statistical significance, only the ANCOVA tests are reported here to avoid redundancy.

Hypotheses Testing

Amount of Time Spent on the Purchase Decision

A two-way ANCOVA found the main effect of choice uncertainty [$F(1,86) = 222.33$, $p < .001$, $\eta_p^2 = .721$], and the interaction effect between knowledge and choice uncertainty [$F(1,86) = 4.29$, $p < .05$, $\eta_p^2 = .048$]. Brand loyalty as a covariate was also significant [$F(1,86) = 5.41$, $p < .05$, $\eta_p^2 = .059$] in the model. Nevertheless, conducting the analysis as an ANOVA test without the covariate produced no differences in significance. These results did not support H1-a, but support H2-a. There were two additional findings. One was brand loyalty in this study played a significant role affecting the amount of time spent. The other was related to the interaction effect. Higher levels of choice uncertainty led to travelers spending more time searching decision-relevant information through the Internet when levels of knowledge uncertainty were higher. When levels of knowledge uncertainty were lower, the levels of choice uncertainty had a diminished effect on the amount of time spent on purchase decision.

Depth of Search

A significant interaction effect between knowledge and choice uncertainty [$F(1,86)=19.35$, $p < .001$, $\eta_p^2 = .18$] was found. Conducting the analysis as an ANOVA test without the covariate produced no differences in significance. Hence, these results supported neither H1-b nor H2-b. The observed tendencies of both hypotheses can be interpreted that higher levels of choice uncertainty lead to lower levels of consumer search depth, whereas higher levels of knowledge uncertainty result in higher levels of consumer search depth using the Internet. As for the interaction effect, it may be described that lower choice uncertainty led to higher levels of consumer search depth when higher consumer knowledge uncertainty occurs. When consumer knowledge uncertainty was lower, the levels of consumer choice uncertainty had a diminished impact on the consumer search depth.

Breadth of Search

A two-way ANCOVA revealed significant main effects of knowledge uncertainty [$F(1,86)=15.77$, $p < .001$, $\eta_p^2 = .155$] and choice uncertainty [$F(1,86)=253.21$, $p < .001$, $\eta_p^2 = .746$]. Neither the interaction effect between knowledge and choice uncertainty nor the effect of brand loyalty as a covariate was significant in the model. Conducting the analysis as an ANOVA test without the covariate produced no differences in significance. These results support both H1-c and H2-c.

Total Search

A two-way ANCOVA revealed significant main effects of knowledge uncertainty [$F(1,86) = 30.16$, $p < .001$, $\eta_p^2 = .26$] and choice uncertainty [$F(1,86) = 280.96$, $p < .001$, $\eta_p^2 = .766$]. Neither the interaction effect between knowledge and choice uncertainty nor the effect of brand loyalty as a covariate was significant in the model. Conducting the analysis as an ANOVA test without the covariate produced no differences in significance. These results support H2-d. Despite significant main effect of knowledge uncertainty found, H1-d was not supported. However, the opposite result was found that higher levels of knowledge uncertainty, in fact, positively affected consumer total amount of search using the Internet.

DISCUSSION AND IMPLICATION

Choice Uncertainty and Information Search

Findings from this study rendered partial supports to the hypotheses drawn from previous literature that higher levels of product choice uncertainty result in higher levels of consumer online information search efforts referred to as the amount time spent on purchase decision, depth of search, breadth of search, and total search. Consistent with the findings from Urbany et al.'s study (1989), the amount of information search (i.e., the amount of time spent and total search) and search breadth were a positive function of choice uncertainty. The findings are also explained by Lanzetta's (1963) argument that uncertainty that occurred when consumers experience difficulty of choosing the best alternative results in conflict and, immediately, the motivation to resolve the conflict, thereby leading to consumers undertaking extensive information search. However, higher levels of product choice uncertainty did not result in higher levels of depth of search, but rather lower levels of search depth. A possible explanation for this finding is that as the information search paradigm in economics predicts, if choice alternatives are equally good (high choice uncertainty), there is little effort in undertaking extensive information search since the decision maker is equally well off no matter which one s/he decides to choose. In other words, participants in this study may have perceived lower expected benefits from search and thereby lower motivation to seek additional product attribute information that can be used to be able to rank the alternatives.

Knowledge Uncertainty and Information Search

The present study only lent partial support to the hypotheses drawn from previous literature that product knowledge uncertainty decreases consumer information search efforts. First, knowledge uncertainty did not make any difference on the amount of time spent. This finding may have resulted from the unique features of online information search environment. Contrary to the predictions of the economics of information theory, high knowledge uncertainty appeared not to be associated with high search costs. Rather, the result may reflect that the cost-effective feature of the online information search environment enables people to save searching time and efforts. Second, higher levels of knowledge uncertainty lead to travel consumers more deeply searching for a larger amount of information. In other words, when people were not familiar with hotels available, they tended to do a further search for a wider range of attributes per hotel and search more information relevant to hotels considered for their choice. This finding was not consistent with our hypothesis, but in fact exactly opposite. A possible explanation of the observed tendency may relate to Wood and Lynch's study (2002) arguing that those with higher prior knowledge (lower knowledge uncertainty) tend to learn less about a new product due to their overconfidence or the "feeling of knowing" phenomenon (p.417). The study discusses that confidence in one's existing knowledge limits one's desire to search additional information. Since overconfidence may cause knowledgeable consumers to inappropriately rely on self-generated inferences (Wood & Lynch, 2002), participants under the condition of the lower knowledge uncertainty may have undertaken less intensive and extensive information search than those in high uncertainty condition. Third, as initially expected, higher levels of product knowledge uncertainty resulted in lower levels of search breadth. People who were unfamiliar with and did not have much knowledge about hotels available to choose from tended to consider a lesser number of hotels in their consideration set. This finding was consistent with our hypotheses drawn from the previous research, and several other studies also confirmed the positive relationship between product class knowledge, objective and subjective knowledge (i.e., perceived knowledge) and the size of the consideration set (e.g., Srinivasan & Ratchford, 1991; Wirtz & Mattila, 2003).

Implications

The present study demonstrated that uncertainty is a concept that can be used to explain the variance in the extent of consumer search for online hotel booking. This study is one of the first approaches categorizing consumers' prepurchase uncertainty into two dimensions in the hospitality context. The findings may help researchers and practitioners understand multiple dimensions of consumer uncertainty that lead to different external information search behavior. This study also suggests that online information search environment is a unique place where economics of information theory may not be applicable, thereby leaving open the possibility for researchers to look thoroughly into as a research venue for consumers' prepurchase information search behavior. There are several marketing implications for practitioners. In the online hotel booking channel, people frequently use a function that allows them to narrow down their choice set, based upon the price range, hotel class, positive consumer rating and so forth. On narrowing down their choice set according to their preference, consumers can only see hotels that have similar or equivalent quality in some specific categories. With those hotels, people experience high choice uncertainty, thereby undertaking extensive information search through the online hotel booking webpage that has detailed information about hotels. Even though it is not guaranteed that people make transactions in the hotel

booking website which they first visit, there is a possibility that people are more likely to stay a website that provides sufficient, relevant, and meaningful information about hotels. Therefore, for those who manage a hotel booking channel, it might be useful to keep updating information about hotels and tailor information to consumers' need to facilitate their decision-making process. People in the hotel marketing division should communicate with the booking channel retailers to provide updated hotel information and detailed features so that they can upload the newest information about hotels, a practice that ultimately entices consumer to choose their hotel more through the hotel booking website.

LIMITATIONS AND FUTURE RESEARCH

The present study has limitations. First, the small sample size ($N=91$) was small, and the study examined a fairly homogeneous group of consumers in a single product category. This might affect the generalizability of findings to other contexts. Future research needs to replicate this study with another consumer sample. Second, the scenario and information search task assigned to participants may not have been realistic enough to have motivated them to undertake information search. Third, because price, the strongest motivation of information search, was controlled in this study, participant information search efforts may have been underestimated in this study. Future research should investigate how difference of product price affects consumer information search behavior. Finally, another recommendation for future research is the conceptualization and measurement of the degree of knowledge uncertainty. Measurement of such knowledge structures is at a very rudimentary stage. Conceptualization and measurement of multidimensional knowledge structures are crucial next steps in research on the effects of knowledge uncertainty on consumer information search, buying behavior and consumer choice. Recent research has examined the knowledge structure by a multidimensional approach (e.g., familiarity, expertise, credibility, subjective knowledge, and objective knowledge). Such approaches would provide more detailed examination of the effects of particular aspects of knowledge uncertainty than the broad manipulation used in the present study.

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EVALUATION OF POTENTIAL FOOD SAFETY TRAINING NEEDS FOR HEALTH INSPECTORS AND OPERATORS

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ABSTRACT

This study examined how individual health inspector and restaurant type impacted sanitation inspection scores and the frequency of each violation. The goal was to determine if training needs could be identified through a longitudinal study of inspection results. The results of this study show that inspectors give different scores to different operation type of restaurants. This study further went on to identify ten violations that varied by inspector, operation type, or both. This variation can be used as an indicator of the need for additional training in those areas by inspectors, managers, or both.

Key Words: health inspector, foodservice, food safety, health inspection score, sanitation violation

INTRODUCTION

Consumers' interest and concern about food safety and sanitation in the eating place have increased in recent years. They expect safe food in clean restaurants. In most instances customers can not see how their food is prepared, this further stimulating their interest in food safety and concern over foodborne illness in restaurants. One of the measures of food sanitation in the restaurant industry is restaurant inspections conducted by health departments. According to Fielding, Aguirre, and Palaiologos (2001), restaurant sanitation inspections are the most important component of public health efforts to prevent foodborne illness outbreaks. In order to achieve that goal, health inspectors need to do more than just identify problems. According to Walczak and Reuter (2004), State regulators' goals "are to cooperate with operators to correct the violations observed and to educate operators and employees on how best to avoid problems in the future".

In addition to helping make restaurants safer by working with operators, inspectors also have a responsibility to help consumers protect themselves by providing a measure of how safe it is to eat in the operations they inspect. Similar to test scores in a school, the health inspection scores or grades in the restaurant industry are considered an indicator or a measurement of the food safety in a restaurant and can be used as a tool to compare restaurants. For consumers to make informed decisions concerning food safety, they not only need to have access to inspection scores, but also the inspection criteria must be uniformly applied to all establishments.

Unfortunately, this may not be the case since inspection scores may be influenced by many factors, such as the health inspection system format, the individual health inspectors, time needed to conduct inspections, and the type of operation or menu (Seiver and Hatfield, 2000). In addition, there could be other possible factors; such as, inspectors' education and training on food safety and restaurant managers' attitude and sensitivity to compliance with food safety regulations.

While the inspector and the inspection process is a vital part of ensuring food safety in a restaurant, the manager's role may be even more important. The inspector is only in an operation conducting a routine inspection twice a year; management is likely to have a greater impact on food safety since managers spend much more time in

an operation than do inspectors. In as much as an inspection score is a representation of how sanitary a restaurant is, it is also a direct reflection on the food safety knowledge/attitude of management.

It is important that areas of deficiency in both the inspector and manager food safety knowledge be identified so that training programs can be modified as required to provide more uniform health scores and a safer food supply. Therefore, the goal of this study was to verify the impact of inspector and operation type on health inspection scores and to determine if particular areas of deficiency can be identified.

LITERATURE REVIEW

The National Restaurant Association Educational Foundation (NRAEF, 2004) reported that foodborne illness affects millions of people each year. According to Mead et al (1999), foodborne diseases are thought to cause approximately 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths in the United States annually. The Food and Drug Administration (FDA) and the Food Safety Inspection Service (FSIS) reported that hospitalizations due to foodborne illnesses cost more than \$3 billion annually, and productivity losses between \$20 and \$40 billion annually (FDA and FSIS, 2002). The most important component of public health efforts to reduce the risk of outbreaks of foodborne illness is the retail food establishment inspection. (Fielding, Aguirre, and Palaiologos, 2001). However, the results of food establishment inspection could be impacted by many factors including inspector and operation type (Seiver and Hatfield, 2000). Seiver and Hatfield (2000) questioned whether grades would be the same if two health professionals inspect the same restaurant at the same time. Their study implied that there was a perceived difference in the way individual inspectors evaluated operations. In a study conducted by Frash, Almanza, and Stahura (2003), the possibility of health inspector bias between local independent restaurateurs and unknown chain operators was discussed. For instance, health inspectors may forgive local managers unconsciously and may develop a closer personal relationship with them which could reduce objectivity. Also, it is commonly assumed that if their relationship has been built up favorably, there could be possibility to give restaurants lower scores. A Nation's Restaurant News editorial (NRN, 2000) reported that inconsistencies in the interpretation of restaurant inspection criteria among health inspectors have made it difficult to operate restaurants in multiple jurisdictions. In other words, if a restaurant owner has several restaurants in different jurisdictions; different health inspectors in different jurisdictions could interpret the same inspection criteria differently. Thus, the owner may be confused and find it difficult to follow restaurant inspection criteria in each jurisdiction.

One reason for variation between inspectors could have to do with training. The FDA Food Code allows the health inspectors to use their professional judgment to determine the seriousness and likelihood of the violations (FDA, 1997). Their judgment could be affected by the inspectors' qualifications, specialty, and working experience. However, most inspectors are not required to possess specialized training or specific food safety certification (Tong, 1999). Further, at least seven states have no state level minimum requirements, and ten states only require a high school diploma (Chien, 2005). If not-qualified inspectors evaluate restaurants' sanitation and cleanliness, the results of inspections may not be reliable.

In a study conducted by Isaacs, Abernathy, Hart, and Wilson (1999), 70 health inspectors were asked about the degree of influence of certain factor when they performed restaurant inspections. The most frequently identified influence factors were the jurisdiction's regulations (94% of respondents), next was their own personal experience as an inspector (93%) followed by the past performance of the establishment (87%). Since 93% of the respondents indicated they rely on their personal experience, it is reasonable to assume that this may cause variation in the results of inspections since each inspector is likely to have had different experiences.

Moving beyond the impact of the inspector, the next factor that must be considered is the operation's manager. Today's managers face many challenges to preventing foodborne illness in their restaurants including: high employee turnover rates; the service of potentially hazardous food; and service to increasingly high risk populations such as elderly people, young children, pregnant women, and people taking medications (NRAEF, 2004). Therefore, in order to prevent foodborne illness and keep the public healthy, effective and efficient food safety systems are needed; such as, the FDA Food Code, a health inspection system, active managerial control, and food safety inspections conducted by a regulatory agency (NRAEF, 2004).

How managers utilize food safety systems can be affected by their education and training on food safety as well as their attitude and sensitivity to compliance. This in turn affects how employees deal with food safety.

According to Howes, McEwen, Griffiths, and Harris (1996), the success of a sanitation program is directly related to the managers and/or corporate supervisors and depends on their efforts to transfer knowledge to their workers. Food safety education can reduce the number of violations and increase employees practicing what they learned (Cochran-Yantis, Belo, Giampaoli, McProud, and Everly, 1996).

Johnson, Shin, Feinstein, and Mayer (2003) conducted a study to measure and compare food safety knowledge and attitude of restaurant employees between the fine dining and quick service restaurants. Their results showed that the fine dining employees had more knowledge with a higher education level and more years working in the industry. Several researchers (Seiver and Hatfield, 2000; Roberson, Binkley, Almanza, and Ismail, 2003) found that fast-food or relatively simple menu restaurants tend to receive higher grades than ones that use slower and more complex preparation type menus. Both studies indicated that operation types will impact the results of food establishment inspection.

In addition, the size of the restaurant may influence inspection scores (Seiver and Hatfield, 2000). For example small fast-food restaurants may receive higher scores and large complex operation restaurants may commonly receive lower scores. The differences between the scores can be greater than what can be explained by the difference in menus. In addition, whether the restaurant is an independent or part of a chain can also impact scores. A study conducted by Frash, Almanza and Stahura (2003) found that full-service chain restaurants had significantly more health inspection violations than full-service independent restaurants.

How restaurants are classified is important when comparing operation types. Frash, Almanza and Stahura (2003) defined restaurant types based on classifications from the NRA, which are full-service restaurants (defined as: a complete menu of full meals, full waiter/waitress service while customers are seated, and customer payments being done after consuming the meal), full-service restaurants chain, limited-service restaurants (defined as: a limited menu, limited waiter/waitress service, and customer payments being done before consuming the meal), limited-service restaurants chain, and cafeteria (defined as: the service of various prepared foods and beverages primarily through the use of a cafeteria line where customers make selections from displayed items, and limited or no waiter/waitress service). These criteria were used to further classify restaurants in this study based on operational types provided in health inspection reports in Tippecanoe County. Operation types used in Tippecanoe County are as follows: full service, full service with buffet, full service with catering, catering, fast food, eatery/snack bar, school/full service, school/satellite, tavern/full service, tavern, temporary (for profit), temporary (non-profit), mobile, shaved ice, mobile shaved ice, soup kitchen, commissary, registered facility, supermarket, convenience, convenience with deli, bakery, and deli.

Even though prior studies mentioned health inspectors' bias when assessing the condition of food safety in a restaurant, there is no empirical evidence of the impact an individual health inspector has on the restaurant inspection score. Therefore, this study was designed to investigate the influence of individual health inspectors on the results of restaurant sanitation inspections using empirical evidence from one of the counties in the State of Indiana. In addition, this paper examined the impacts of restaurant operation types on the results of restaurant inspections. Once those links had been established, this study sought to use frequencies of violations to determine if there were areas that need greater emphasis during training. By identifying areas of deficiency either with inspectors or managers, targeted training can be used to effectively improve food safety in those establishments.

METHODOLOGY

In order to evaluate training needs for health inspectors and operators, this study used longitudinal data from restaurant sanitation inspections by the Tippecanoe County Health Department in the State of Indiana from late 2000 to 2004, excluding the year 2003 which was unavailable. The inspection results from the beginning of 2000 were omitted because inspections at that time were conducted using a different inspection system from the one used during the remaining years included in this study. At the beginning of 2000, Tippecanoe County used a traditional scoring system. In late 2000 they changed to a critical and non-critical rating system. Because of the differences in the inspection forms and formats, it was not possible to accurately convert the traditional scoring system results into the current scoring system. When the county adopted the new inspection format, some items were eliminated from the inspection form and others were added.

The first step was to determine the operation type for each restaurant. The restaurants were classified in accordance with the criteria from the Frash, Almanza, and Stahura (2003) study with minor modifications as suggested by the Tippecanoe County Health Department. One modification was to add cafeterias and buffets to the limited-service category. In addition, a new category of fast-food was added. The resulting categories were full-service, limited-service, fast-food, taverns, and schools. Other operation categories from the inspection data were evaluated and rejected because the numbers in those categories were not sufficient for proper statistical analysis.

Finally, a number of operations did not fit any of the five categories and were eliminated because they were so small in number and because they represented such a diverse group of not-for-profit, limited product, or unusual service operations that they could not be meaningfully combined into one category. These included daycares, pharmacies/drug stores, private clubs, supermarkets, shelters/churches, bakeries, fair/festivals, mobile foodservices, shaved ice purveyors, soup kitchens, commissaries, and registered facility types.

The next step was to determine which types of inspections to include in the analysis. Tippecanoe County Health Department uses 19 types of inspections, such as regular routine, routine from complaint, routine survey/samples, complaint, pre-opening, opening, educational training, regular temporary, regular temporary follow-up, follow-up to complaint, follow-up to pre-opening, fire, closure, consultation, follow-up to fire, miscellaneous investigation, regular vending, and regular vending follow-up. This study focused on the regular routine inspections only, which are usually conducted twice per year as part of the on-going regulatory system. The other types of inspections were not included because they were too few in number and irregular in occurrence. For instance, follow-up inspections were only done if there was a problem. Since many of the operations did not experience problems significant enough to require a follow up inspection, using this data would likely skew the results.

Finally, a determination was made as to which inspectors to include in the study. During the time from which inspection reports were pulled for use in this study there were nine health inspectors employed by the county. Four of the inspectors conducted more than 100 inspections between late 2000 and the end of 2004. Those four were included in this study. The remaining five were removed because they had only conducted 14 or less inspections, which was not enough to properly evaluate the results in relationship to frequency of violations cited by operation type.

Data were entered into a Microsoft Access 2003 database using a web-based form. The form was made to look like the inspection form used by the health department during the time of this study. By matching the data entry form to the actual inspection form the possibility of entry errors was reduced. It also made it quicker and easier to enter the data. To evaluate the overall performances of inspected operations, points were assigned critical violations and non-critical violations based on how they translated back to the traditional inspection form. When an exact match could not be made with the traditional form, the investigators relied on their collective experience to assign points. Traditionally, when calculating an inspection score, repeats and multiple violations are not given additional weight; therefore, they were not given additional weight in the calculated inspection score for this study.

Statistical analyses were first conducted using SAS program version 9.1 and Microsoft office Excel 2003. General linear models (GLM) were conducted to examine the impact of independent variables and interactions among variables to restaurant inspection scores. The dependent variable was the calculated inspection scores. Independent variables were health inspector and restaurant operation type. One hundred fifteen (115) foodservice establishments and 1067 routine inspections were used after data screening.

In order to use a Generalized Linear Model (GLM) instead of the ANOVA model which requires all treatment sample sizes to be equal, assumptions must be made, such as independence and a normal distribution of the response variable (Y). In this study, the response variable was a health inspection score. Regular routine restaurant inspections were conducted by health departments without any pre-notice with rotated inspectors. Therefore, the inspection scores were thought to be independent observations among the food establishments. In order to check whether these data had a normal distribution, qqplot in Proc Univariate and plot in the Proc gplot procedures were conducted. The distribution of the error terms had heavy tails implying that the distribution of original data had higher probabilities in the tails than a normal distribution. This was expected however, because restaurants should obtain above 75 points, otherwise they fail to pass the sanitary condition. According to Kutner, Nachtsheim, Neter, and Li (2005), non-normality of error terms is not a serious problem in the GLM model. In

addition, the sample size for this study was large enough (N=1067) so that this effect among residuals was not important and could be ignored for most purpose (Kutner, Nachtsheim, Neter, and Li, 2005); therefore, the following GLM model was proposed and examined.

$$\text{Health Inspection Score}_{ij} = \mu \dots + \text{Operation Type}_i + \text{Health Inspector}_j + (\text{Interaction Effect between Operation Type and Health Inspector})_{ij} + \text{Error}_{ij}$$

When significance was observed for the categorical variables, such as operation type, health inspector, and interaction effect between them, t-tests LSD and Scheffe's multiple comparison procedure were employed for post hoc tests.

After it had been determined that the operation type, health inspector, and the interaction between health inspector and operation type were significant, the frequency of individual violations was examined in an effort to identify areas where there were significant differences. Those differences could indicate areas where additional training is required for inspectors, operators, or both. To ensure that there were sufficient numbers to evaluate both inspectors and operator types, only those violations with an overall frequency greater than 80 were included in this analysis. Significant differences for each of the violations were determined using Chi-Square statistics. First the violations were evaluated by inspector, then by operation type, and finally by inspector for each operation type.

RESULTS AND DISCUSSION

A statistically significant difference was found in the average inspection score by inspector (F-value=52.71, p-value<0.0001). The R^2 for the variable inspector was 0.1295, implying that the health inspector variable explained 12.95% of the total variation in the health inspection score. Post Hoc tests including t-tests LSD and Scheffe's multiple comparison procedure were also conducted. The results from the t-test LSD pairwise comparison indicated the individual health inspector significantly affected the overall inspection scores. Based on the LSD test, Inspector 2's average of 97.23 out of 100 was significantly higher at $\alpha=0.05$ than that of the other three inspectors. At 91.64 out of 100, Inspector 4 had the lowest average; that average was significantly lower at $\alpha=0.05$ than that of the other three inspectors. The final two inspectors, Inspectors 8 and 17 posted inspection averages of 95.33 and 94.34, respectively. Those averages were not statistically significantly different from each other at $\alpha=0.05$. This analysis showed that there were significant differences among the inspectors implying that inspectors give various scores to restaurants. But it did not provide information as to why or any indication of specific training needs for the inspectors. To get at that information further analyses were required.

The next area examined was the variance by operation type. A statistically significant difference between operation types can be seen in Table 1. The Schools operation type had the highest average at 98.63 out of 100 and the Full-Service type had the lowest at 92.34. As with looking at the inspectors by themselves, this evaluation of operation type indicates that there is a difference between types implying that different operation type of restaurants received different scores of inspection. But it does not provide enough information to make any recommendations for training needs for operators or inspectors.

Table 1
Comparison of average inspection scores by health inspector for each operation type

Operation Type	N	Mean*	Std. Deviation	F-value	p-value
Schools	200	98.63 _a	2.6551	1.63	0.1817
Fast-Food	371	94.69 _b	5.3344	15.24	<.0001
Limited-Service	112	93.61 _{bc}	6.5173	14.35	<.0001
Taverns	124	92.64 _c	5.9787	10.22	<.0001
Full-Service	260	92.34 _c	6.7012	28.69	<.0001

N=1067, $R^2 = 0.2807$, F-value=21.50, p-value<.0001.

*Means with the same subscript are not significantly different for the t-tests LSD and Scheffe's multiple comparison at $\alpha=0.05$.

Before conducting the analyses of individual violations, the interaction effect of operation type and inspector was examined. It is logical to expect such an interaction effect since it has already been shown that

inspection results can be influenced by inspector. As an inspector gains experience with a particular type of operation, it is logical to assume that the manner in which an individual conducts the inspection will also change. This means that an inspector with extensive experience with a particular operation type will inspect differently than an inspector with less experience. The result is an interaction effect between inspector and operation type. This is exactly what was found, as shown in Tables 1 and 2.

The interaction between operation type and health inspector was found to be significant. Table 1 shows that with the exception of Schools, there was a significant difference in the way inspectors rated operations. That difference was significant with a p-value of less than 0.0001 in all cases. Even greater evidence of the interaction effect can be seen in Table 2. In all cases, there was a statistically significant difference in how each inspector rated each operation type. The results imply that inspectors gave different scores to different operation types. For instance, Inspector 4 gave lower scores to limited-service operations than to fast-food operations. However, Inspector 2 did just the opposite: that inspector gave slightly lower scores to the fast-food operations than to limited-service operations. When inspector, operation type and the interaction effect between the two were included in the model, 28.07 percent of the variation in health inspection scores was explained. Clearly there are indications that there may be a need for additional training to increase consistency within reliability; not only the operators by operation type, but also for the inspectors.

Table 2
Comparison of average inspection scores by operation type for each inspector

Inspector	Full-Service (N)	Limited-Service (N)	Fast-Food (N)	Schools (N)	Taverns (N)	F-value	p-value
2*	96.06 (51)	97.37 (27)	96.75 (97)	99.15 (53)	97.27 (22)	2.77	0.0261
4*	88.84 (85)	89.42 (38)	92.17 (114)	97.37 (57)	90.14 (44)	27.44	<.0001
8*	94.09 (100)	94.79 (34)	95.25 (125)	99.17 (65)	93.24 (46)	12.73	<.0001
17*	89.54 (24)	94.92 (13)	95.25 (35)	98.96 (25)	91.00 (12)	12.06	<.0001

N=1067, $R^2 = 0.2807$, F-value=21.50, p-value<.0001.

* Significant changes by operation type for inspectors.

Table 3
Descriptions violations

Violation	Frequency	Description
F5C	250	Critical Violation: Food--Limitation of growth of organisms of public health concern
F3NC	216	Non-critical Violation: Food--Protection from contamination after receiving
MP4NC	115	Non-critical Violation: Management & Personnel--Hygienic practices
EUL5NC	110	Non-critical Violation: Equipment, Utensils & Linen--Maintenance and operation
EUL6NC	102	Non-critical Violation: Equipment, Utensils & Linen--Cleaning of equipment and utensils
EUL9NC	102	Non-critical Violation: Equipment, Utensils & Linen--Protection of clean items
F3C	97	Critical Violation: Food--Protection from contamination after receiving
WPW2C	83	Critical Violation: Water, Plumbing & Waste--Plumbing system
EUL6C	82	Critical Violation: Equipment, Utensils & Linen--Cleaning of equipment and utensils
EUL3NC	81	Non-critical Violation: Equipment, Utensils & Linen--Numbers and capacities

The next step to the determination of training needs is to look at the frequencies of individual violations by inspector and operation type. Only those violations with frequencies greater than 80 were included in this evaluation. Table 3 gives a brief description of each of the violations that met the criteria for inclusion. As shown in Table 4, there were significant differences in the number of times each inspector found each violation except for EUL3NC (Non-critical Violation: Equipment, Utensils & Linen--Numbers and capacities). The numbers in Table 4 suggest

that Inspector 4 was the strictest inspector, finding the greatest frequency of violations per inspection for seven of the ten violations. On the other end of the spectrum were Inspectors 2 and 17, both had the lowest frequency of violations per inspection for five of the ten violations. This is consistent with the average score given by each inspector. Inspector 4 had the lowest average while Inspector 2 had the highest. Inspector 17 had the second highest average. On the surface it appears that additional training is needed for inspectors for all violations except EUL3NC; however, that might not be a fair assessment. Before making such a statement it is important to look at the impact of operation type. It may be that the variation can be explained by the variation in the number of each operation type inspected. If this is true then the problem may be related more to manager issues than inspector variance.

The results for the frequency of violation can be found in Table 5. Schools had the lowest violation rates for all listed violations. This is consistent with their higher overall inspection score average. Full-service and taverns have the greatest violation rates, five and four out of ten, respectively. Again this could be predicted as they had the lowest overall inspection score averages. The differences among the different operation types are significant for all violations. This is quite possibly due to the different levels of complexities for menu preparation for the different operation types. Even if this is true, it does not negate the need for specialized training for the different operation types. If the different operation types are experiencing different violations rates for each violation, then it would be more cost effective and efficient to concentrate the training on the areas most at risk.

Table 4
Number of violations cited by each inspector

Violation	Inspector 2 N=250 (%N)	4 N=338 (%N)	8 N=370 (%N)	17 N=109 (%N)	Total N=1067 (%N)	Chi-square	p-value
F5C	16 (6.4%)	109 (32.2%)	89 (24.1%)	36 (33.0%)	250 (23.4%)	60.74	<.0001
F3NC	41 (16.4%)	79 (23.4%)	82 (22.2%)	14 (12.8%)	216 (20.2%)	8.88	0.0310
MP4NC	38 (15.2%)	46 (13.6%)	25 (6.8%)	6 (5.5%)	115 (10.8%)	17.28	0.0006
EUL5NC	16 (6.4%)	70 (20.7%)	21 (5.7%)	3 (2.8%)	110 (10.3%)	58.99	<.0001
EUL6NC	29 (10.0%)	43 (12.7%)	29 (7.8%)	1 (0.9%)	102 (9.6%)	15.79	0.0012
EUL9NC	5 (2.0%)	54 (16.0%)	37 (10.0%)	6 (5.5%)	102 (9.6%)	34.78	<.0001
F3C	4 (1.6%)	39 (11.5%)	33 (8.9%)	21 (16.3%)	97 (9.1%)	33.09	<.0001
WPW2C	11 (4.4%)	47 (13.9%)	20 (5.4%)	5 (4.6%)	83 (7.8%)	26.12	<.0001
EUL6C	3 (1.2%)	52 (15.4%)	15 (4.1%)	12 (11.0%)	82 (7.7%)	51.64	<.0001
EUL3NC	12 (4.8%)	34 (10.1%)	30 (8.1%)	5 (4.6%)	81 (7.6%)	7.25	0.0642

See Table 3 for a brief description of the violations.

The final piece of information for determining where to concentrate training was to evaluate how each inspector did when the frequency of violations were broken out by inspector and operation type. For full-service operations, seven of the ten violations showed significant differences among inspectors. Fast-food operations did only marginally better with six out of the ten violations showing significant differences among inspectors. For both limited-service and taverns, the majority of the violations (six out of ten) were not significantly different among inspectors. This support the need for customized training for inspectors and managers based on operation type.

Table 5
Number of violations cited by operation type

Violation	Operation Type							
	Full-Service N=260 (%N)	Limited-Service N=112 (%N)	Fast-Food N=371 (%N)	Schools N=200 (%N)	Taverns N=124 (%N)	Total N=1067 (%N)	Chi- square	p-value
F5C	89 (34.2%)	38 (33.9%)	75 (20.2%)	14 (7.0%)	34 (27.4%)	250 (23.4%)	57.12	<.0001
F3NC	82 (31.5%)	33 (29.5%)	71 (19.1%)	6 (3.0%)	24 (19.4%)	216 (20.2%)	63.62	<.0001
MP4NC	22 (8.5%)	11 (9.8%)	65 (17.5%)	5 (2.5%)	12 (9.7%)	115 (10.8%)	33.50	<.0001
EUL5NC	46 (17.7%)	13 (11.6%)	28 (7.5%)	9 (4.5%)	14 (11.3%)	110 (10.3%)	26.02	<.0001
EUL6NC	34 (13.1%)	7 (6.3%)	37 (10.0%)	1 (0.5%)	23 (18.5%)	102 (9.6%)	35.78	<.0001
EUL9NC	47 (18.1%)	11 (9.8%)	32 (8.6%)	3 (1.5%)	9 (7.3%)	102 (9.6%)	37.97	<.0001
F3C	37 (14.2%)	9 (8.0%)	37 (10.0%)	2 (1.0%)	12 (9.7%)	97 (9.1%)	24.71	<.0001
WPW2C	19 (7.3%)	11 (9.8%)	26 (7.0%)	2 (1.0%)	25 (20.2%)	83 (7.8%)	40.35	<.0001
EUL6C	24 (9.2%)	12 (10.7%)	26 (7.0%)	4 (2.0%)	16 (12.9%)	82 (7.7%)	16.43	0.0025
EUL3NC	22 (8.5%)	7 (6.3%)	27 (7.3%)	7 (3.5%)	18 (14.5%)	81 (7.6%)	13.87	0.0077

See Table 3 for a brief description of the violations.

CONCLUSION

This study represents a different approach to determining training needs for inspectors and managers. It focused on violations by operation type and inspector. From the results it is clear that there is variation between how inspectors rate each operation type. There is also evidence that there is variation among operation types. The GLM procedure employed to examine the impact of individual health inspectors and operation type on the results showed that 28.07 percent of the variation in scores could be explained by those variables. In practical terms, this percentage represents a marked portion of the variation in scores.

In order to give consumers a better picture of the safety of an operation it may be better to statistically control for the inspector when reporting scores. Better yet, by analyzing the frequency of violations by inspector and operation type, training programs should perhaps be tailored to individuals and operation types. By focusing on the most common mistakes for each operation type, the training could be made more efficient and cost effective. It is not clear from the small sample if it is more advantageous to train the inspector or manager. It is likely that by training both of them, the maximum reduction in violations may be achieved.

While the number of inspectors studied (four) is a limitation of the study, the results clearly indicate the need for additional studies. Inspection scores are serious business for both public safety and the overall success of a restaurant. The impacts that the inspector and operation type have on inspection scores clearly bias those scores and limit their usefulness in determining the safest places to eat. This in turn may have an unfair impact on the operation's business. While the statistical model can indicate the need for training, it can also be used to give the public a better tool for comparing restaurants. The use of a statistical model such as the one developed as part of this study may help to more fairly standardize scores among operations and may also provide a clearer assessment of restaurants inspections for consumers when they are deciding where to eat.

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A STUDY OF MAINLAND CHINESE TOURISTS' PERCEIVED SHOPPING QUALITY AND VALUE IN HONG KONG

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ABSTRACT

The purpose of the study was to understand mainland Chinese tourists' perceived shopping quality and value in Hong Kong. 778 mainland Chinese tourists were surveyed. Among the shopping quality dimensions evaluated, environment had the highest ratings, followed by products, payment, staff, convenience, and promotion. They also had higher ratings on utilitarian value attained through their shopping experiences than hedonic value. Visitors who had their travel and accommodation arrangements made by travel agents had significantly higher ratings on the hedonic value attained than those traveled on other modes.

Key Words: shopping, shopping experience, shopping quality, perceived value, satisfaction, Chinese

INTRODUCTION

The improvement in the average standard of living and disposable income of the mainland Chinese population, the implementation of a five-day work week, the relaxation of visa arrangements since the 1990s, and the introduction of the Individual Visit Scheme (IVS) for residents of a number of mainland Chinese cities and regions encouraged more mainland Chinese to visit Hong Kong (Hong Kong Tourism Board, 2007; Zhang, and Lam, 1999). Mainland China was the main source market of visitors to Hong Kong in 2006, with 13.6 million visitors representing 53.8% of the total tourist arrivals for that year. They were the highest spending visitors, with the average per capita spending for overnight and same-day in town visitors reaching HK\$4,705 (US\$603 with exchange rate of US\$1 to HK\$7.8) and HK\$1,537 (US\$197), respectively. 67.5% of the expenditure of overnight mainland Chinese visitors was spent on shopping, amounting to a monetary value of HK\$26.8 billion (US\$3.4 billion).

Mainland Chinese tourists are attracted to Hong Kong as a "shopping paradise" where they can find products that are often scarce at home and of better quality (Zhang, Jenkins, and Qu, 2003). They no longer shop only in the traditional tourist shopping areas where they can find "bargains," but also visit shopping malls and places where local Hong Kong people shop. The increase in the number of tourists from mainland China has altered the customer mix for many retailers, with mainland Chinese tourists emerging as a primary market. Recently there were new reports on mainland Chinese tour groups being "forced" to shop, having poor quality or even "fake" products purposely sold to them, and some extreme cases of the whole tour group being dissented on the street by the tour guide since they did not make any purchase at designated shops. All these reports certainly damaged Hong Kong's image of "shopping paradise". However, these reports were mainly incidents happened to mainland Chinese tourists visiting Hong Kong in tour groups, there are more and more mainland Chinese tourists visiting Hong Kong on individual basis since the launch of the Individual Visitor Scheme program. It will be of importance to understand the shopping behavior and evaluations of shopping experiences mainland Chinese tourists visiting Hong Kong on different travel arrangements (i.e. tour groups, individual travel or business occasions). Therefore, the purpose of the study is to understand the shopping behavioral characteristics of mainland Chinese tourists and their perceived shopping quality and value in Hong Kong.

LITERATURE REVIEW

Evaluation of Tourism Shopping Experience

Day-to-day shopping experiences may not be the same as a shopping experience away from home, especially given that tourists often act and behave in a context different from that of their normal everyday life when they are traveling (Oh, Cheng, Lehto, and O'Leary, 2004). Tourists may or may not have a shopping list of specific items for purchase, but may simply be looking for excitement and pleasure, and opportunities to experience local culture and interact with local people (Littrell et al., 1994). Tourists may also want to take home memories of a trip by bringing back souvenirs and special items that were purchased at the travel destination. In some cultures, gift-giving is a normal practice as a means of showing respect and maintaining and strengthening social relationships (Park, 2000). Jansen-Verbeke (1991) also added that tourists shop because they want to take advantage of the unique goods that are available or bargain prices, and that some may be motivated to shop by a favorable currency exchange rate. Based on these characteristics of tourism and tourism shopping experiences, it is suggested that tourists evaluate their shopping experience based on criteria that differ from those used in their day-to-day shopping at home.

Quality

Tourists evaluate the quality of their shopping experiences in terms of the two dimensions of product attributes and store attributes. Product attributes are the characteristics of a product that influence the tourist's decision to purchase or not to purchase the product. The most frequently studied product attributes in tourism shopping studies include value, product display characteristics, aesthetic qualities, workmanship, uniqueness, size, fragility, manageability, and reputation of producer (Kim and Littrell, 1999; Littrell et al., 1994; Pysarchik, 1989; Swanson and Horridge, 2004; Tuner and Reisinger, 2001). Store attributes are attributes that are related to the store or shopping venue itself. The most frequently measured store attributes include price, quality, assortment, fashion, sales personnel, locational convenience, services, sales promotions, advertising, store atmosphere, reputation, store hours, accessibility, availability of free parking, and proximity to lodging facilities, high quality/imaginative/attractive displays, behavior of sales personnel, atmosphere, appearance and authenticity of shopping malls, cleanliness and service, and the availability of entertainment (Berry, 1969; Goeldner, Ritchie and McIntosh, 2000; Littrell et al., 1994; Littrell, Paige, and Song, 2004; Pysarchik, 1989).

Satisfaction

Customer satisfaction is defined either as an outcome or a process of the consumption experience (Yi, 1990). Churchill and Suprenant (1982, p. 493) stated that customer satisfaction is "an outcome of purchase and it is formed after the buyer's comparison of the rewards and the costs of the purchase in relation to the anticipated consequences." A similar definition was proposed by Westbrook and Reilly (1983), but with an emphasis on customer satisfaction as an emotional response to the experiences provided by or associated with particular products of services purchases, the retail outlet, or the overall market place. Customer satisfaction has been defined by researchers based on two levels of aggregations: transaction-specific assessment and overall assessment (Bitner and Hubber, 1994; Parasuraman, Zeithaml, and Berry, 1994; Rust and Oliver, 1994; Teas, 1993). With transaction-specific assessment, customer satisfaction is taken to mean the emotional reaction that follows a disconfirmation experience at the consumption-specific level that leads to a global assessment of perceived quality (Oliver, 1980). With overall assessment, satisfaction represents a customer's overall satisfaction with an organization based on all encounters and experiences with that particular organization (Bitner and Hubber, 1994; Johnson, Anderson and Fornell, 1995; Parasuraman et al., 1994). In the tourism literature, these two concepts are also used to understand how tourists evaluate their tourism experiences and how this relates to tourist behavior.

Perceived value

In addition to evaluating the level of quality and satisfaction of a shopping experience, customers also form perceptions of the value that they receive. Zeithaml (1988) defined value as "the consumer's overall assessment of the utility of a product based on the perceptions of what is received and what is given." Value is a function not only of cost to the customer, but also of the result achieved by the customer (Heskett et al., 2000). Holbrook and Hirschman (1982) proposed that value that is generated from the consumption process has two main dimensions: utilitarian and hedonic. They asserted that customers will judge the value that is generated by consuming a product based on utilitarian criteria, such as how well a product or service serves its intended purpose or performs its proper function, but will also evaluate the perceived value based on hedonic criteria, such as the appreciation of and feelings about the product and the consumption experience. Babin, Darden, and Griffin (1994) developed a shopping

value scale, based on Holbrook and Hirschman's (1982) two-dimensional consumption process. The scale is an overall assessment of subjective worth that considers all of the relevant evaluative criteria. The outcomes of shopping can be task-related with a utilitarian value (the successful purchase of an item) or can lead to the attainment of hedonic value (enjoyment of the experience or fun through the shopping process). A number of researchers have demonstrated that both utilitarian and hedonic values can be attained by customers during a shopping experience (Babin and Babin, 2001; Babin, et al., 1994; Carpenter, Moore, and Fairhurst, 2005; Fisher and Arnold, 1990; Michon and Chebat, 2004; Sherry, 1990). Tourists may have in mind exactly what they want to purchase when they come to Hong Kong, and utilitarian value may be attained. At the same time, some tourists may be more interested in the pleasure and fun aspects of shopping, and may visit shopping venues not because they need to buy anything in particular, but simply to look for the experience to bargain with retailers or to enjoy the shopping environment. In this case, the attainment of hedonic value will be important. The shopping value scale for hedonic and utilitarian values is therefore adapted for use in this study.

METHODOLOGY

Instrument development

The instrument for data collection was developed based on the review of existing literatures and personal interviews of five mainland Chinese visitors. The survey questionnaire was developed in English and translated into Chinese by adopting the translation/back translation procedure as described by Brislin (1976). A professional native Chinese translator first translated the English questionnaire into Chinese, and then another professional native translator translated the Chinese version back to English. The content and wording of both the English and Chinese questionnaires were commented upon by two university faculty members to ensure the content validity.

The first section collected information about the traveling and shopping related behavioral characteristics of mainland Chinese tourists on this particular trip to Hong Kong. The second section consisted of a list of attributes to measure the perceptions of the mainland Chinese tourists of the quality of the shopping experience immediately before they were interviewed by using a seven-point Likert-type scale (where 1 = Strongly Disagree and 7 = Strongly Agree). The third section comprised a list of statements representing the hedonic and utilitarian values. The respondents were asked to indicate the value that they derived from the shopping experience immediately before the interview using a seven-point Likert-type scale (where 1 = strongly disagree and 7 = strongly agree). The respondents were then asked to evaluate their overall satisfaction with the shopping experience by means of three adjective pairs (extremely dissatisfied/extremely satisfied, extremely displeased/extremely pleased, and extremely unfavorable/extremely favorable) that were measured by a 10-point semantic differential scale. The last section collected information about the demographic characteristics of the respondents. The instrument was pilot tested with 50 conveniently selected respondents at different shopping locations to examine the reliability of the questionnaire.

Sampling and data collection

The target population for the study was mainland Chinese tourists who shopped in Hong Kong during an 18-day period in May 2006. Two shopping locations, three hotels of different rate category, and one guesthouse were selected for conducting the interviews. A systematic sampling method was used with every fifth person (who appeared to be Chinese) who walked through the exit of the store and every person who appeared to be a Chinese tourist who walked out of the elevator and into the hotel was selected to participate in the interview. If the identified person declined the invitation, then the next person was selected. The questionnaire was administered by the interviewers in Putonghua or Cantonese. Only mainland Chinese tourists who had been shopping (but not necessarily purchased something) before the interview qualified for the survey. The study has some methodological limitations. There are several possibilities for sampling bias to have occurred due to the fact that the data collection was done during the specific season and in the specific locations. As the respondents were invited to participate in the survey on a voluntary basis, there may have been a non-response bias.

Data Analysis

Descriptive statistics were used to determine the mean and standard deviation scores for demographic, travel and shopping characteristics, shopping quality, shopping value attained, and overall satisfaction. Exploratory factor analysis was used to reduce the list of shopping quality attributes and shopping quality into smaller number of dimensions. A one-way ANOVA and independent sample t-tests were conducted to compare the mean scores of perceived shopping quality, shopping value attained, and overall satisfaction for mainland Chinese tourists with different types of travel arrangements.

RESULTS OF THE STUDY

Travel and Shopping Profiles

778 usable questionnaires were available for the analysis. The majority of the respondents were visiting Hong Kong for leisure, and most had traveled as part of full-package tours. Close to a quarter of the respondents came to Hong Kong by their own arrangements. Over 70% of the respondents spent HK\$2,000 (US\$256) or less per day on shopping. The most frequently purchased items were, in descending order, cosmetic and beauty products, gold, jewelry, and watches, electronic appliances, and clothing and footwear. Over 50% indicated that the purchases were for self-consumption, were gifts, or were purchased on behalf of others.

Perception of shopping quality, value, and satisfaction

Exploratory factor analysis was used to reduce the shopping quality and shopping value scales into smaller numbers of shopping quality dimensions. Principal component analysis with Varimax rotation was employed. The correlation matrix was first inspected to ensure that there was a sufficient number of correlations greater than 0.3. Both the KMO-MSA (0.902 and 0.798 respectively) and Bartlett's test of sphericity (sig. <0.000) indicated that the data were appropriate for factor analysis. Based on the review of eigenvalues, the percentage of variance explained, the item communalities, and the scree test, six service quality dimensions were extracted and explained 70.2% of the total variance. The reliability coefficients of the six factors ranged from 0.64 to 0.88, which is considered acceptable (Nunnally and Bernstein, 1994) for exploratory research. Table 1 shows that of the six shopping quality dimensions, environment had the highest rating (mean = 5.63 out of 7), followed by products (mean = 5.55), payment (mean = 5.36), staff (mean = 5.33), convenience (mean = 5.19) and promotion (mean = 4.88). For the shopping value scale, two factors hedonic value and utilitarian value were extracted and explained 74.1% of the total variance. The reliability coefficients of the hedonic and utilitarian value were 0.83 and 0.89 respectively. The results of the descriptive statistics showed that the respondents have a higher level of agreement on the attainment of utilitarian value (mean = 5.12) than on the attainment of hedonic value (mean = 4.94). Overall, the respondents were satisfied with the shopping experience in Hong Kong, and had a mean satisfaction score of 7.04 out of 10.

Table 1
Perceptions of shopping quality, value, and overall satisfaction

	No. of attributes in each dimension	Variance explained	Cronbach's alpha	Mean	SD
Shopping quality dimension					
Environment	4	16.1	0.881	5.63	0.87
Products	4	14.9	0.783	5.55	0.82
Staff	4	12.4	0.839	5.33	1.01
Payment	2	9.7	0.645	5.36	0.99
Convenience	3	9.7	0.676	5.19	0.88
Promotion	2	7.4	0.830	4.88	1.25
Shopping values					
Hedonic value	4	42.8	0.826	4.94	1.04
Utilitarian value	2	31.3	0.894	5.12	1.27
Overall satisfaction	3	N/A	0.952	7.04	1.67

A scale of 1 to 7 was used to measure the shopping quality and shopping value. A scale of 1 to 10 was used to measure overall satisfaction.

Comparison of respondents with different types of travel arrangement

The respondents with different types of travel arrangements were compared to determine whether there were any differences in their perceptions of shopping quality, shopping value, and overall satisfaction. The results are shown in Table 2, from which it can be seen that only the perception of payment differed between the different travel arrangement groups. Visitors who came to Hong Kong with only transportation and accommodation arranged through a travel agent had a lower perception of the quality of payment compared to those who came by their own arrangement and those whose travel was arranged by their company. The respondents who visited Hong Kong with only their transportation and accommodation arranged by a travel agent gave a higher rating for hedonic value than utilitarian value, whereas the reverse was true for the other groups. This group also had the highest score for hedonic value of all of the groups. As this group of respondents had no structured itinerary, they had more flexibility in choosing shopping venues. However, although visiting non-traditional tourist shopping areas may be an adventurous

and exciting experience, it might not necessarily have fulfilled their utilitarian objectives. This group had lower mean scores for attitude, subjective norm, and behavioral intention than visitors with other types of travel arrangements.

Table 2
Comparison of respondents with different travel arrangements

	Mean Group 1 (n = 305)	Mean Group 2 (n = 43)	Mean Group 3 (n = 186)	Mean Group 4 (n = 244)	F	P	Sig. Mean Difference (Duncan)
Shopping quality dimension							
Products	5.55	5.28	5.62	5.53	2.051	0.11	N/A
Payment	5.31	5.08	5.51	5.37	2.842	0.04*	3 & 4>2
Environment	5.70	5.58	5.57	5.59	1.211	0.31	N/A
Promotion	4.76	4.82	5.09	4.89	2.654	0.06	N/A
Convenience	5.14	5.04	5.28	5.20	1.333	0.26	N/A
Staff	5.40	5.03	5.35	5.29	1.869	0.13	N/A
Shopping values							
Hedonic value	4.94	5.45	5.11	4.89	3.696	0.01*	2>1,3 & 4
Utilitarian value	5.02	4.88	5.29	5.17	2.285	0.08	N/A
Overall satisfaction	6.96	6.59	7.24	7.07	2.183	0.89	N/A

A scale of 1 to 7 was used to measure the shopping quality and shopping value, and a scale of 1 to 10 was used to measure overall satisfaction.

*Indicates a significant difference at $\alpha \leq 0.05$.

Group 1: Full package tour

Group 2: Only transportation and accommodation arranged through an agent

Group 3: Own arrangement/non-package

Group 4: Travel arranged by company

DISCUSSION AND IMPLICATIONS

Discussion

There is an increasing trend for mainland Chinese visitors to travel on their own, especially if they hail from Guangdong province. As quoted in Hudson (1999), Stewart's (1993) model of holiday-taking suggests that people tend to travel more when they become more affluent. The more travel experience people have, the more adventurous and confident they become, to the extent that they may opt to travel on their own instead of on package tours. With the economic development that has occurred in mainland China and the increasing ease of visa and travel arrangements, it is expected that increasing numbers of mainland visitors will visit Hong Kong on their own. This means that they may no longer be keen to shop in places that target tourists, but will want to shop in places where locals shop.

The most frequently purchased items were, in descending order, cosmetic and beauty products, gold, jewelry, and watches, electronic appliances, and clothing and footwear. Although these types of products are available in mainland China, visitors still purchase them in Hong Kong. This is because they believe that the quality of these products is better in Hong Kong than in mainland China, where fakes and sub-standard products are common. Cosmetics and beauty products were the most popularly purchased items, with comparatively less clothing and footwear being purchased. This may be due to the fact that the risk of purchasing poor quality or even counterfeit clothing and footwear in mainland China would not cause as much harm and financial loss as the purchase of fake cosmetics, gold or jewelry, and electronic appliances. It is very popular among Chinese people to purchase gifts and souvenirs for their friends and relatives or to purchase items on their behalf when they travel abroad. Hence, it is likely that these visitors needed to accomplish a shopping mission during their stay in Hong Kong. As most visitors only stay in Hong Kong for a limited number of days, helping visitors to accomplish their shopping tasks effectively should perhaps be a priority for retailers in Hong Kong.

Shopping environment had the highest mean score, followed by products, payment, staff, convenience, and then promotion. The shopping environment provides the venue in which customers interact with staff, other customers, and the different products and goods that are available. Safety, cleanliness, comfort level, and stylish and modern decoration are all important components of a facilitative shopping environment. Retailers in Hong Kong have done much to enhance the enjoyment of shopping. Safety and cleanliness are basic requirements, but it is also necessary to make the venue comfortable by providing rest areas with couches in retail outlets, for example.

Compared to similar shopping venues in mainland China, retail facilities in Hong Kong are generally perceived to be of a very high standard, and to be stylish and modern in their design. Promotion was rated the lowest among the different shopping dimensions, which is similar to the results of the study that was conducted by the Quality Tourism Service Association (QTSA) of Hong Kong in 2004 (QTSA, 2004), which found that mainland Chinese tourists consider cash discounts on goods to be attractive sales features, and were not entirely pleased with the discounts and promotions that are offered in Hong Kong.

The mainland Chinese tourists had higher ratings on utilitarian value attained through their shopping experiences than hedonic value. During the interviews, it was observed that the majority had a list of items that they wanted to purchase for themselves or for others while in Hong Kong. Many mainland Chinese tourists buy cosmetics, gold and jewelry, and electronic appliances in Hong Kong in the knowledge that they are of a higher quality and more fashionable. It is also very convenient for tourists to shop in Hong Kong, as the opening hours of most retail stores, department stores, shopping malls, and open markets are long and the locations convenient. For the respondents who came to Hong Kong on all-inclusive package tours, shopping was included as part of their itinerary, and they had a more than ample opportunity to successfully make purchases. Hence, it was easy for these respondents to obtain utilitarian value (attainment of goals, accomplishment of purchase tasks, and so on) from the shopping experience in Hong Kong.

The overall satisfaction of the respondents with the shopping experience in Hong Kong was relatively high, with a score of 7.02 out of 10. This result somewhat contradicts the recent news reports about the dissatisfaction of mainland Chinese tourists who join “zero-fee tours” to Hong Kong, in which shopping is a major component of the itinerary. These reports have featured stories of mainland Chinese tourists being forced to stay in shops for extended periods and being pressured into buying things that they did not want, or being taken to unpleasant locations as a punishment for refusing to purchase goods or not spending the expected amount (Chen and Xin, 2006). The respondents in this study gave quite a positive evaluation of their shopping experience in Hong Kong, and seemed to be generally satisfied. This discrepancy may be due to the fact that the respondents in this study comprised not only tourists on all-inclusive package tours, but also independent leisure and business travelers. Independent travelers, and especially those who travel under the IVS or visit Hong Kong for business purposes, are more likely to be able to decide where they want to shop and what they want to buy.

Implications

The results of this study can be used by retail operators to better understand the shopping behavior and their evaluations of their shopping experience in Hong Kong. The instrument that was developed for this study can be used as a tool for retail operators to monitor the quality of the shopping experience that is delivered by their establishments, and to identify areas that need improvement.

Promotion has the lowest evaluation among all the shopping quality dimensions. Free samples and gifts with company's name can be given to tourists to enhance the utilitarian value of their shopping experience, as they can take the samples and gifts home either for their own consumption, as souvenirs of their visit to Hong Kong, or as gifts for their friends and relatives. Offering special discounts only to mainland Chinese tourists, for example, will make them feel “special.” Shopping malls and department stores can also consider using thematic promotions or events to attract attention. Convenience is another area which needs improvement comparing to other aspects of shopping. Perhaps because most stayed only a few days in Hong Kong, and some only came for a day-trip. An important objective for short-stay tourists should be to make shopping a hassle-free experience, which can be achieved through extended opening hours and additional services, such as convenient returns and refund policies, delivery, and the provision of directional maps for shopping malls and department stores. Cleanliness, safety, and the design of the displays and layout of the shopping venue all go toward creating an appropriate environment that facilitates the shopping experience. The design of a shopping venue should aim to create an atmosphere that makes shopping there more enjoyable. As most mainland Chinese tourists tend to travel with companions (e.g. family members, their spouse, or friends), an environment that facilitates the enjoyment of both tourists and their companions is important. This would encourage shoppers to stay longer in the shop, and the longer shoppers stay in a shop, the greater the likelihood that they will make purchases. Furthermore, if the companions have a better experience, then they will feel positive about shopping, and will be more likely to approve of their friends visiting and shopping in Hong Kong in the future. Qualified staff with good language skills, product knowledge, and service attitude is essential in improving the overall satisfaction of tourists. Guy Salter, Deputy Chairman of the Walpole

Group of London, strongly believes that for retailers to outperform competitors, it is important to use “old skills” in a “new medium” (Salter, 2006). Old skills include the personal touch and having a relationship with customers, and the new medium means the use of technology to communicate with customers. To enhance such personal relationships and communication, retail stores should be designed to facilitate interaction between customers and salespeople. Finally, having quality products is obviously important as the products themselves are an important outcome of the shopping experience. In Hong Kong, bearing the Quality Tourism Services and “No fakes” designations will help shops to convey the message to tourists that the products that they sell are of good quality and authentic. This approach would work well with the provision of product and service guarantees that allow tourists to return products with which they are unsatisfied. Such offers are especially important for mainland Chinese tourists who are not traveling with tour groups, as they have more flexibility in planning their shopping itinerary and will be easily able to return goods. However, if products are not of a sufficient quality in the first place, then tourists will not be confident in returning to Hong Kong to shop in the future. Hence, it is important for the Hong Kong government to protect tourists by promulgating laws that prohibit the sale of fraudulent goods and protect the rights of shoppers.

It was found that tourists who did not travel with a tour group but only arranged their accommodation and transportation through a travel agent gave relatively lower ratings for all aspects of the shopping experience. This may be because in planning their trip they relied on their own information sources. Providing relevant and accurate shopping information to these tourists would make their shopping experience more enjoyable. In a study on the information search behavior of mainland Chinese tourists visiting Hong Kong, Lo, Cheung, and Law (2004) found that personal experience, friends or relatives, travel agency/tour company, the Internet, and airlines were the top five information sources most frequently used by travelers from mainland China, although traditionally personal experience, friends or relatives, tourism offices and associations and travel guide books are the information sources that are considered to be most influential among such travelers. Either way, retailers should consider making information about their stores available through one or more of these influential channels.

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HOTEL REITS VS. HOTEL C-CORPORATIONS: WHO HAS AN EDGE?

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ABSTRACT

In the past decade REITs have emerged as into entities that have distinct financial and organizational characteristics from their C-Corporation counterparts. The present study investigates whether hotel REITs achieved a better risk-adjusted performance based on accounting and market-based measures than hotel C-Corporations during the period from 1996-2006. The results show that hotel REITs showed better performance on risk-adjusted basis by having a lower instability ROA index, and higher Sharpe, Jensen, and Sortino values. We conclude that hotel REITs delivered better risk-adjusted performance from 1996 to 2006.

Key Words: hotel REITs, hotel C-Corps, risk-adjusted performance.

INTRODUCTION

In the 1990's real estate investment trusts (REITs) experienced rapid growth fueled by readily available external equity and debt financing (Mooradian & Yang, 2001). This development brought about a new approach for some hotel companies which elected to gain REIT status in early 1990's. Burch and Taylor (1997) document that \$1.4 billion was raised in the initial public offerings of 13 hotel REITs between August 1993 and August 1996. The growth of hotel REITs has significantly increased the capital flow into the hotel industry and, consequently, changed the structure of hotel real estate ownership (Kim et al., 2002). As part of the emergence of this company structure, there has been a growing interest related to hotel REITs in popular press and academic literature (e.g. Delcours & Dickens, 2004; Kim et al., 2002; Mooradian & Yang, 2001). While these studies have enriched hotel REITs literature, they did not answer the question whether adopting a REIT structure (rather than a C-Corporation), results in higher risk-adjusted reward to the investors. Thus, there exists a void in the literature concerning comparison of risk-adjusted performance of hotel REITs and hotel C-Corporations (henceforth hotel C-Corps). Therefore, the aim of this research is to fill the void by comparing the risk-adjusted performance of hotel REITs and hotel C-Corps. This paper makes two contributions to the body of knowledge in lodging research. First, we measure firm performance of hotel C-Corps vs. hotel REITs by using instability index of Hunter and Coggin (1984). Second, we utilize semi-variance measures such as Sortino and Upside Probability Ratio (UPR) to assess the risk-adjusted performance of two groups of companies.

HOTEL REITS VS. HOTEL C-CORPS CHARACTERISTICS

In 1993 there were only two firms with REIT structure and a market capitalization of \$100 million. However, within five years there were 14 firms with market capitalization exceeding \$35 billion (Bealls & Arabia, 1998). One of the main drivers behind this explosive hotel REIT growth can be attributed to the the exemption of corporate level income tax for organizations with REIT structure (Chan et al., 2003; Gyourko & Sinai, 1999). Another important benefit for REITs is that they can forego costly tax-minimizing strategies followed by taxable firms. In addition, hotel REITs are attractive to institutional investors who would like to invest in real estate but want to diversify and maintain liquidity because REIT shares are traded in stock markets (Bealls & Singh, 2002). As a disadvantage to the REIT structure, Gyourko & Sinai (1999) point out that the primary cost of the REIT structure results from having to raise more capital externally than would otherwise be the case if REITs could retain all the earnings they desired.

However, to maintain tax exemption status, a REIT must satisfy four regulatory requirements related to asset composition, income source, mandatory income distribution and ownership diversification. These requirements eventually shape REITs into a corporate format that possesses different financial and organizational

characteristics from their C-Corp counterparts (Tang & Jang, 2008). On the other side of the coin are the hotel C-Corps which enjoy limited liability, multiple levels of ownership which can be expressed as greater autonomy in structuring shareholder return by using common and preferred stock with different rights, terms and conditions, and accumulated income that can be passed through to shareholders, thereby representing a capital gain when these shares are sold (Mckay, 2002).

In the past ten 10 years hotel C-Corps have gradually moved from being property owners to management-contract operators and franchisors. In the new millennium, several large hotel companies, such as Marriott International, InterContinental Hotels Group (IHG), and Hilton Hotels Corporation, have continued to sell assets in order to raise capital and meet stock market expectations. As a matter of fact, companies in favor of a separation between “bricks and brain” point out that the stock market is more likely to better value hotel companies with less ownership than those involved in real estate (Sebbane, 2007).

Particularly, in the last three years (2004-2006) Starwood Hotels and Resorts transformed itself from a real estate driven firm to a branding organization shedding \$4.6 billion in real estate assets and returning \$4.3 billion to its shareholders (Alessi, 2007). According to Mark Abramson, former Senior Managing Director at New York-based investment bank Bear Stearns & Co., Inc., the need to divest real estate was understandable since the public equity market was not rewarding hotel companies for the value created in these assets to the same degree that private equity and hotel REIT investors were willing to provide (Sebbane, 2007).

On one hand we have taxation benefits of hotel REITs and on the other we observe the flexibility and branding/managing focus of hotel C-Corps. Therefore, it is still an open question as to which ownership structure is better for stockholders from a risk-reward perspective, C-Corps or hotel REITs. The next section provides a brief review of the extant literature, followed by description of the methodology, results and a discussion section. We conclude with limitations of the study and ideas about future research.

PERFORMANCE OF HOTEL REITS VS. HOTEL C-CORPS

Although there is a plethora of research related to financial performance and capital market performance of companies with REIT structure, there are very few studies investigating the risk-adjusted performance of hotel REITs against their counterparts (hotel C-Corps). One of the few studies that draws a comparison between these structures is that of Mooradian and Yang (2001), who report that hotel C-corps firms generate higher income, represented by asset-adjusted EBITDA and EBIT, and have higher market-to-book ratios than hotel REITs. This clearly demonstrates that a lower fixed-asset level is beneficial to company's profitability. Tang and Jang (2008) make an argument that a company may lose flexibility in maximizing its profitability through the timely optimization of asset composition if a high percentage of its assets is tied up in the form of fixed assets. However, their study demonstrates that there was not a significant difference in profitability between hotel REITs and hotel C-Corps. Tang and Jang's (2008) findings denote that the benefits of tax exemption are offset by the extra costs induced by REIT requirements.

Due to their low level of assets, hotel C-Corps have higher market-to-book ratio than their REIT counterparts. This gap in market-to-book ratio is expected to widen as lodging firms continue to pursue asset-light strategy. Low level of assets leads to higher ROA for C-Corps relative to hotel REITs (Mooradian & Yang, 2001). On the other hand though, hotel C-Corps tend to be more leveraged which is expected to influence their return on equity values (Tang & Jang, 2008).

RISK-ADJUSTED PERFORMANCE MEASURES AND THEIR APPLICATION TO HOTEL REITS

Proper evaluation of the performance of a given company is important for its executives, employees and shareholders. This performance should be assessed from both accounting and capital measures perspective and should be adjusted for the risk level of these measures (Gu & Singh, 1994). While accounting performance measures such as Return on Equity (ROE) and Return on Assets (ROA) frequently appear in the extant literature, the use of risk-adjusted accounting performance measures may be considered a relatively unexplored area of research. The most common risk-adjusted accounting performance measures are variance based measures such as Standard Deviation ROA (SDROA) (Chan et al., 1993; Fatemi, 1984). However, Kim et al. (1989) argue that the instability measure (e.g. instability ROA index) of Hunter and Coggin (1984) is superior to simple variance approach because instability index does not confound stable growth or stable decline with variability. This measure has been

employed by Lee and Jang (2007) in their study related to diversification of lodging firms. Instability index is particularly useful for evaluating individual business units (e.g. single hotel property) because they do not have their stocks listed on major stock exchanges. However, because accounting performance measures are historical in nature, capital market-based measures should be employed to assess the forward looking performance of publicly-traded firms (Nickel & Rodriguez, 2002).

The three most commonly used risk-adjusted performance measures to evaluate the relationship between risk and return in capital markets are: Treynor Index (Treynor, 1965), the Sharpe Ratio (Sharpe, 1966), and the Jensen Index (Jensen, 1968). These measures are built on Markowitz's (1959) mean-variance paradigm, which assumes that the mean and standard deviation of the distribution of one-period return are sufficient statistics for evaluating the prospects of an investment portfolio.

The Sharpe Ratio was introduced as a reward to variability ratio for evaluating the performance of mutual funds. An important property of this measure is that it can be used as an objective function in mean-variance optimization where the portfolio with the highest Sharpe Ratio is the optimal portfolio of risky assets. The Sharpe Ratio is calculated by first determining the excess return of a portfolio (portfolio rate of return less risk-free rate) and then dividing the excess return by the standard deviation of the portfolio returns. The Sharpe Ratio can be interpreted as a t-statistic to test the hypothesis that the return on the portfolio is equal to the risk-free return (Sharpe, 1994). A higher Sharpe Ratio is consistent with a higher probability that the portfolio return will exceed the risk-free return. Consequently, the Sharpe Ratio can be used by investors who prefer a portfolio with a minimal probability of falling below the risk-free rate (which is generally equal to the yield of a 1-month Treasury bill). Petersen, Singh, Sheel (2003) compared hotel REITs performance by using Sharpe index and reported that hotel REITs outperformed the other REIT sectors. Kim et al. (2002) found that hotel REITs had the highest mean return and the highest standard deviation (i.e., total risk) among the seven REIT sectors. However, Kim et al. (2002) did not explicitly report the Sharpe Ratio for these REIT sectors.

The Jensen and Treynor indices price a stock according to the Capital Asset Pricing Model (CAPM) (Lintner, 1965; Sharpe, 1964), which can be described as:

$$E(R_i) = R_f + [\beta_i (R_m - R_f)],$$

where, R_m is the market return of stocks and securities, R_f is the risk-free rate, β_i is the coefficient that measures the covariance of the risky asset with the market portfolio, and $E(R_i)$ is the expected return of i stock.

The Treynor Index measures the excess return per unit of risk by including the systematic risk in the calculation process. The Treynor Index is obtained by dividing the excess return of a portfolio over its systematic risk (i.e., beta). Thus, higher the Treynor Index, the more return the fund or portfolio is providing per unit of risk assumed. A higher index value indicates superior performance of the respective fund or stock against its competitors. Although no study directly employed the Treynor Ratio to compare hotel REITs and C-Corps, some inference can be made from Mooradian and Yang's (2001) study which showed that hotel C-corps had higher beta but also higher stock return. Because reward (stock returns) to risk (beta) ratio is higher for hotel C-Corps, we can assume that hotel C-Corps had a higher Treynor Ratio. Delcours and Dickens (2004) confirmed that hotel REITs have a lower beta (0.313) compared to hotel C-Corps (0.492) but noted that this difference was not statistically significant.

The Jensen Index is the average return on a portfolio over and above what is predicted by the CAPM, given the portfolio's beta and the average market return. Jensen's measure is the alpha value of the portfolio. The alpha is the intercept from a regression of fund excess returns on market excess returns. In practical terms, the alpha value indicates whether a given stock or fund has achieved a return higher than its expected return based on the CAPM. In their study Kim et al. (2002) compared the Jensen Index of hotel REITs against seven other REIT sectors. Their results demonstrated that hotel REITs had a significantly lower Jensen Index compared to the office, industrial, residential, and diversified REITs over the period of 1993–1999.

During the decade of 1990s, two other innovative risk-adjusted performance measures were introduced, the Sortino Ratio (Sortino & van der Meer, 1991) and the Upside Potential Ratio (UPR) (Sortino, van der Meer, &

Plantinga, 1999). The Sortino Ratio is a derivation of the Sharpe ratio and it penalizes returns below the risk-free rate. In other words, we can think of the Sortino ratio as the excess return (actual over target) per unit of downside risk. Sortino and van der Meer (1991) stated that realizations above the reference point (referred to as Minimal Acceptable Return (MAR)) imply that goals are accomplished and, therefore, are considered “good volatility” (also referred to as “upside volatility”). Thus, only realizations below the reference point imply a failure to accomplish desired goals and should, therefore, be considered “bad volatility” or risk. The UPR measures the upside potential relative to the downside variance of a stock/portfolio. Deviation of returns below the target return are weighted quadratically and returns above the target return are weighted linearly. Upside potential can be described as the probable return in excess of the MAR (Sortino et al., 1999).

METHODOLOGY

Sample

A sample for lodging firms were selected from Standard Industry Classification (SIC) code of 7011 (N=46). Casino firms were excluded from the sample because they are believed to have many different business characteristics in terms of market segments and major sources of income (Jang & Yu, 2002). Hotel REITs were selected based on the classification of National Association of Real Estate Investment Trusts (NAREIT) and the initial sample consisted of 24 hotel REITs.

The following two requirements were applied in order to include only pure-play firms and ensure that enough data is available: 1) at least 70% of revenues is generated from lodging operations or hotel real estate (Rumelt, 1974), 2) a minimum of 36 months stock market trading has to be available (as suggested by Annin (1997) and Fama and French (1997)). The Forsey-Sortino bootstrapping procedure also requires 36 months of stock returns. As a result of applying these inclusiveness criteria, the final sample consisted 37 C-Corps and 19 hotel REITs.

Data

Data was collected from 1996 through 2006 to control for the effect of business cycles and to increase the number of data points for robust statistical analysis. The monthly stock return data adjusted for dividends and splits were obtained from the Center for Research in Security Prices (CRSP). The CRSP Index's value-weighted return, which consists of stocks listed on New York Stock Exchange (NYSE), American Stock Exchange (Amex), and National Association of Securities Dealers Association Quotations (NASDAQ), was used as a proxy for market return. Monthly stock returns for each firm for the five-year period (1998-2002) were utilized in this study. ROE and ROA data was obtained from Compustat Database. There were 69 firm observations for hotel C-Corps and 45 for hotel REITs.

Data analysis

As suggested by previous studies in the same vein of research (e.g. Amit & Livnat, 1988; Chathoth & Olsen, 2007; Singh & Gu, 1994; Lee & Jang, 2007), we use accounting and market measures of performance (return) and instability (risk). The accounting measures of risk-adjusted performance include ROA and ROE. We used instability indices proposed by Hunter and Coggin (1983). $Instability_{ROA/ROE}$ is the instability index of ROA/ROE, $\sigma_{ROA/ROE}$ is the standard deviation of ROA/ROE, and R^2 is the coefficient of determination from the simple linear ROA/ROE trend regression. See Kim et al. (1989, page 59) for a detailed description and advantages of the Hunter and Coggin's instability measure over other similar measures.

We used 12 quarterly data points in the simple linear trend analysis for the ROA and ROE instability measures in order to be in congruence with the market-based risk-adjusted performance measures. All risk-adjusted performance measures were estimated by using 36 monthly stock returns and market returns. The Sharpe Ratio (1966) was derived by dividing annualized monthly excess returns (firm return less risk-free rate) for each company to its standard deviation. The Treynor Index was computed by dividing the excess return to the systematic risk (beta) of the portfolio. Beta was estimated by regressing the excess return of each company over the excess market return. The excess market return ($R_m - R_f$) was computed by subtracting the one-month Treasury bill rate from the monthly value-weighted CRSP index return. The Jensen Index was obtained by regressing the excess returns of a firm portfolio over the excess returns of the market. Treynor ratio is inapplicable when stocks/funds have negative betas because a stock with positive returns and negative beta will have a negative Treynor Ratio (Huber, 2005; Kothari & Warner, 2001).

The first downside risk measure, the Sortino Ratio, was obtained by dividing the excess return by the downside risk. In order to be in congruence with the Sharpe Ratio, risk free rate was used as a surrogate MAR figure for both the Sortino and the UPR measures. Calculation of the UPR uses a lognormal distribution (Aitchinson and Brown, 1957) which necessitates the estimation of three parameters: mean, standard deviation, and extreme value. This procedure uses annualized mean and standard deviations rather than utilizing monthly values as in Sharpe Ratio. Extreme value is calculated by taking either minimum or maximum return of the portfolio (whichever is closer to the mean) and moving this value four standard deviations further from the mean. The present study utilized the Forsey-Sortino Model (FSM) software to estimate the Sortino Ratio and the UPR for both samples. The FSM uses the bootstrap procedure of Efron and Tibshirani (1993) by generating 1,000 monthly returns from the three-year five-year-period monthly returns of the two portfolios.

Semi-variance or downside risk (DR) measures have been proposed as an alternative approach to the traditional mean-variance (MV) analysis for real estate portfolio diversification (e.g. Sing & Ong, 2000; Sivitanides, 1998;) to address the question of which of these two approaches produces less risky portfolios at a given expected return. However, as Cheng and Wolverton (2001) pointed out, the two methods are not directly comparable because the MV and DR approaches use different risk measures (variance for MV portfolios and semi-variance for DR portfolios). To better assess the applicability of DR, Cheng (2001) conducts bootstrap simulation and shows that the DR model produces portfolio compositions that are more realistic and closer to the practice of institutional investors in terms of real estate allocation. The author also states that these results are encouraging for investors who are mainly concerned with downside risks, because not only is the DR approach more consistent with investors' risk perception, it also seem to improve portfolio performance with higher median returns.

Independent samples *t*-tests on all risk-adjusted performance measures (accounting and market) were employed to assess the mean differences in risk-adjusted performance between hotel REITs and hotel C-Corps. To address some concerns related with the normal distribution of variables, we implemented log transformation for the two variables (Instability_{ROA} and Instability_{ROE}). In addition, market-based risk-adjusted performance measures were winsorized at 5% to mitigate the effect of outliers and increase robustness of results.

RESULTS AND DISCUSSION

Descriptive Results

Table 1 summarizes the mean values of monthly stock returns, standard deviation of these returns, beta, and downside deviation (risk). Hotel REITs have lower beta values, lower standard and downside deviations, and higher stock returns than hotel C-Corps. These findings are in unison with previous studies (e.g. Delcours & Dickens, 2004) which reported similar results. For empirical purposes we employ a *t*-test to investigate the mean downside risk for two groups and find that hotel REITs had a higher level of downside risk ($p < .01$).

Table 1
Descriptive statistics for two Company Groups

	Group	Mean	SD
Return	Hotel REITs	.1266	.1060
	Hotel C-Corps	.0754	.2332
SD	Hotel REITs	.3169	.1098
	Hotel C-Corps	.4102	.1505
Beta	Hotel REITs	.0086	.0040
	Hotel C-Corps	.0092	.0046
DD	Hotel REITs	.1929	.0837
	Hotel C-Corps	.2641	.1433

Notes: SD = Standard Deviation, DD= Downside Deviation

Risk-adjusted performance

At descriptive level, the mean values for the first risk-adjusted accounting performance measure “instability ROE index” demonstrated that hotel REITs had a lower instability index (See Table 2). However, this difference was not significantly different which leads us to conclude that there is no mean difference between two company groups. Although previous research shows that hotel C-Corps have higher leverage than hotel REITs (Tang & Jang,

2008), the results of this study show that degree of leverage does not increase “instability ROE index” for lodging firms. On the other hand, “instability ROA index” was significantly higher for hotel C-Corps. This result shows that hotel REITs not only have higher level of ROA (Delcours & Dickens, 2004) but also this level of ROA comes with lower instability ROA index.

Table 2
Instability Index Measures for two Company Groups

Measures	Group	Mean	SD	t stat.
Instability _{ROA}	Hotel REITs	1.6523	.4125	-1.95**
	Hotel C-Corps	2.9078	.4945	
Instability _{ROE}	Hotel REITs	4.3656	.7108	-.965
	Hotel C-Corps	5.2309	.5472	

Notes: SD= Standard Deviation, * p < .10, **p<.05,

As it can be seen in Table 3, the Sharpe Ratio for hotel REITs is twice as much as hotel C-Corps and this difference is significant at the .05 level. It should be noted the standard deviation for Sharpe Ratio for REITs was lower than that of C-Corps which denotes that the Sharpe Ratio values showed a lower dispersion for hotel REITs. Unlike the study of Tang and Jang (2008), hotel C-Corps had a positive mean Sharpe Ratio which can be attributed to the fact that the present study encompasses the 11-year period between 1996 and 2006. Although hotel REITs had a higher mean Treynor Ratio than C-Corps, this value was not statistically significant which leads us to conclude that there is no difference in mean Treynor Ratio values between two organizational structures. In practical terms it implies that both company groups delivered similar returns per unit of risk for their shareholders. On the other hand, the Jensen Index revealed a different picture by showing that hotel REITs not only outperformed C-Corps, but also hotel C-Corps had a negative Jensen Index for the observation period. This means that, in aggregate, hotel C-Corps were not able to realize their expected return based on the CAPM framework.

Table 3
Mean-Variance Risk-Adjusted Measures for two Company Groups

Measures	Company	Mean	SD	t stat.
Sharpe	Hotel REITs	.1267	.1674	2.030**
	Hotel C-Corps	.0721	.2746	
Treynor	Hotel REITs	.0196	.1077	1.265
	Hotel C-Corps	-.0296	.0190	
Jensen	Hotel REITs	.3247	.3749	.1690*
	Hotel C-Corps	.1535	.4868	

Notes: SD= Standard Deviation, * p < .10, **p<.05,

Findings for semi-variance based risk-adjusted measures were similar to traditional MV measures (See Table 4). Sortino Ratio for hotel REITs (0.556) was higher than that of hotel C-Corps (0.200) with significance level of 0.10. On the other hand, the mean UPR values for two groups were not significantly different. Results demonstrate that hotel REITs delivered better returns than hotel C-Corps with respect to standard deviation and downside risk. Thus, these findings show that while previous literature documents underperformance of hotel REITs compared to other REIT sectors (Delcours & Dickens, 2004; Kim et al., 2002), hotel REITs showed a better risk-adjusted performance than hotel C-Corps based on accounting (instability ROA) and market-based risk-adjusted performance measures (Sharpe, Jensen and Sortino). In addition, we show that overall hotel REITs are an investment with a lower total risk (standard deviation) and lower downside (risk), which means that ceteris paribus hotel C-Corps need to deliver a better return (accounting or market-based stock return) in order to outperform their counterparts.

Table 4
Semi-variance Risk-Adjusted Measures for two Company Groups

Measures	Company	Mean	SD	t stat.
Sortino	Hotel REITs	.5560	.9779	1.749*
	Hotel C-Corps	.2004	1.0207	
UPR	Hotel REITs	1.5850	.8508	1.233
	Hotel C-Corps	1.3716	.8602	

Notes: SD= Standard Deviation, * $p < .10$, ** $p < .05$

LIMITATIONS AND FUTURE STUDIES

As in all studies, there are some limitations in our study, which we acknowledge. First, like all other papers in this area of research, we do not control for geographic diversification which might influence the risk features of some of the firms. For instance, a large portion of managed property portfolios for some of the major hotel C-Corps such as Marriott, Four Seasons, Hilton, Starwood and Intercontinental Hotel Group are located outside of the United States. In this case, it might be challenging to directly compare these hotel C-Corps to hotel REITs which tend to own hotel properties located primarily in North America (USA and Canada). Because these global C-Corps derive their cash flows from a global portfolio, it is recommended that future studies use global market index such as Morgan Stanley Capital Index when estimating risk-adjusted returns of global C-Corps.

Another fruitful avenue in the realm of comparative studies is to compare the economic value creation of these two types of firm structures. This is because while risk-adjusted performance measures are good indicators to evaluate the performance of two or more portfolios/segments/industries, the risk-adjusted measures do not reflect the actual dollar amount that was generated as a consequence to investment decisions that were made. It would be very useful not only for investors but also for company executives to see how hotel REITs fared against other REIT sectors and hotel C-Corps.

CONCLUSIONS

The major contribution of this paper to the existing body of knowledge is that it compares the risk-adjusted performance of two organization structures by using accounting and market based measures. We find that *ceteris paribus*, hotel REITs yield better performance to their shareholders than C-Corps. This result in itself should be of interest to stock analysts, present and potential investors.

On the other hand, because hotel C-Corps are shedding assets, they can be expected to have more upside potential than downside risk. However, as Lee and Upneja (2007) pointed out, it seems that hotel C-Corps were not able to communicate their strategies to Wall Street and have been constantly undervalued. Perhaps this is among the reasons why private equity firms recently acquired some of the key players in C-Corps arena (e.g. Hilton, Four Seasons, Fairmont).

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RESIDENTS' SUPPORT FOR RURAL TOURISM: AN EXCHANGE AND CONVERGENCE MODEL

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ABSTRACT

A large number of quantitative studies on rural tourism have measured residents' attitudes and perceptions about the impacts of tourism on host communities where tourism is well developed. Few studies have measured residents' attitudes and perceptions prior to tourism development efforts. Additionally these descriptive studies lack a theoretical foundation. The purpose of this study was to assess residents' support for rural tourism in a small rural community. A tourism support measure was modified and used to assess residents' support for rural tourism development.

Key Words: rural tourism, social exchange theory, symbolic convergence theory, support, community visions

INTRODUCTION

After a serious decline in the economy of some rural US regions in the 1980s, tourism and recreation have become important to the economic restructuring of small communities that have traditional agricultural or nonrenewable resource-based economies. Tourism has been promoted as a clean and harmless economic activity, free of the environmental impacts attributed to manufacturing, mining, logging, and intensive agri-business. More importantly tourism and recreational development are often not dependent on outside assistance and can be accomplished with local participation and very little investment credit, training, and capital. Rural lifestyles have been significantly influenced by successful recreational and tourism programs which improve the economic, social, and cultural conditions in the community (Allen, Hafer, Long & Perdue, 1993; Chen & Kerstetter, 1999; Mason & Cheyne, 2000). A large number of quantitative studies on rural tourism have measured residents' attitudes and perceptions about the impacts of tourism and tourism development on host communities where tourism is well developed (Andriotis & Vaughn, 2003). Few studies have measured residents' attitudes and perceptions prior to tourism development efforts (Mason & Cheyne, 2000; Sirakaya, Tene & Sonmez, 2002). Additionally, these descriptive studies lack a theoretical foundation (Ap, 1990; Gursoy, Jurowski, & Uysal, 2002).

Two factors will likely predict support for rural tourism development. First, stability or a city's ability to stay committed to rural tourism development. Secondly, a shared vision among community members for the town as a tourism destination. In this study, Symbolic Convergence Theory (SCT) and Social Exchange Theory (SET) were used to explain support for tourism development among members of a rural community in terms of stability and shared vision. SCT explains how a community builds a common consciousness or vision that provides meaning, emotion, and motive for action (Cragan & Shields, 1998). SET explains stability in terms of perceived rewards and costs to staying or leaving a given relationship or endeavor. SCT features three constructs: Righteous, Social, and Pragmatic visions. For example, a righteous vision would characterize a city as "The Best" or "Superior" tourism destination. A social vision would describe a city as "Friendly" or having other interpersonal qualities attractive to tourists. A pragmatic vision would depict a city as a "Good Value" to which it is easy to travel and is an

inexpensive alternative to other destinations. In terms of SET, costs and reward of rural tourism development feature risks and benefits to the city and community, its people, and its resources.

PURPOSE OF THE STUDY

The purpose of this study was to assess local residents' support for rural tourism development in a small Texas community, as its members considered its potential to become a tourist destination. The following research questions were formulated: 1) What is the nature, direction, and strength of the relationship between perceived costs and rewards and support for rural tourism development? 2) What is the nature, direction, and strength of the relationship between community visions and support for rural tourism development? 3) What is the extent of the interaction of perceived costs and rewards with community visions in predicting support of local residents toward rural tourism?

LITERATURE REVIEW

After the decline of some traditional industries like agriculture, mining, and manufacturing during the 1980s, tourism has become an important economic alternative strategy for revival of rural areas in the US. Many communities have realized the importance and the potential of tourism, and have started to allocate community resources for tourism planning and development. One of the biggest advantages of rural tourism is that it does not require major investment and capital in the beginning phase of the development process. This makes it very attractive as an industry for small rural towns, where resources are limited.

Rural tourism brings more money to the local economy; creates jobs and increases family and community income; helps to diversify and stabilize the rural economy; provides a broader business base for the community and creates an opportunity for attracting other businesses and small industries; provides the opportunity for innovation and creativity; provides the support for existing businesses and services; helps to develop local craft and trade; helps to build up a community infrastructure; provides a team community spirit particularly through the development of cultural and entertainment activities (Gannon, 1994). Tourism development helps two types of businesses in rural areas-those who are directly involved in tourism (e.g. attractions, hotels, motels, restaurants) and those who are indirectly involved in tourism (e.g. gas stations, grocery stores, shopping malls). Another advantage is that rural tourism can generate important secondary income for farm households (Wilson, Fesenmaier, Fesenmaier, & van Es, 2001).

But despite the benefits and its feasibility as an economic development strategy, rural tourism has some disadvantages. The environment can be exposed to risk from unmanaged or ill-managed tourism. Parts of the physical environment are at risk because they are fragile, natural habitats, archaeological sites, historical attractions, and footpaths, are only a few of the resources under threat from the increasing number of visitors. The economic stability of the rural world can be at risk from new, perhaps large scale, tourism businesses, seeking short-term gains. And the cultural heritage may be at risk from outsiders and from influential outside cultures (Lane, 1994). Another problem is that rural tourism can put rural communities in competition against one another. Further, jobs in the tourism industry are usually seasonal and generate profits for only a certain part of the year. However, rural tourism still remains one of the few feasible economic solutions for rural communities (Wilson, Fesenmaier, Fesenmaier, & van Es, 2001).

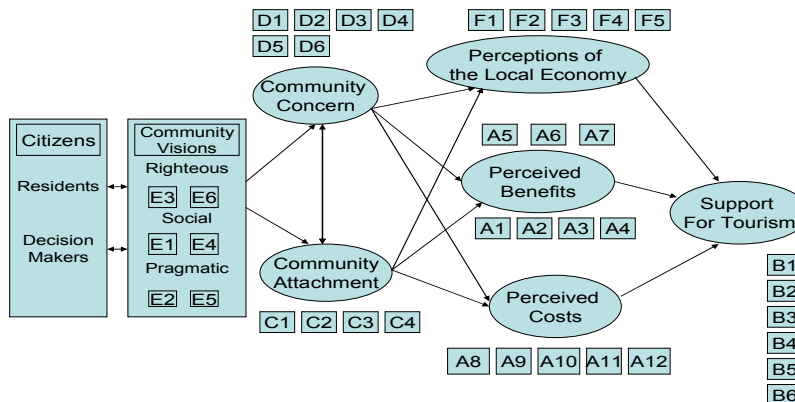
In one of the most cited studies Perdue, Long, & Allen (1990) found that the perceived impacts of tourism decreased as the distance between the individual's home and the tourism sector of the community increased. The favorability of tourism impact perceptions increased with the individual's economic dependency on tourism. Those who benefited from tourism perceived tourism development in a more positive way than those who did not benefit. When controlling for personal benefits from tourism development, tourism impact perceptions were unrelated to resident characteristics. Support for additional tourism development was positively related to the perceived positive impacts of tourism and negatively related to the perceived negative impacts. Support for additional tourism development was negatively related to the perceived future of the community. It was concluded that when the rural economy is not in good shape local residents will support tourism development.

Andriotis and Vaughn (2003) noted that in most studies sociodemographic characteristics appeared to be of little or no significance in explaining the perceptions of residents of tourist areas. Contrary to those research findings, Andriotis and Vaughn found that medium-educated residents (12 years of education) were more likely to

be supportive of tourism development, the less-educated (less than 12 years of education) were more likely to be negative to the economic effects of tourism, and the highly educated (13 or more years of education) were more likely to be concerned about the environmental and social costs of tourism. Most of the studies related to residents' perceptions and attitudes toward tourism development lack a theoretical background. Ap (1990) reviewed four of the most cited research studies and observed that their conceptual base was not linked to any explicit theory. He then suggested that this atheoretical orientation posed problems in the development of a conceptual framework. Ap went on to propose that the Social Exchange Theory (SET), developed by Thibaut and Kelley (1959), and advanced by the research of Homans (1961), Blau (1964), and Emerson (1972), could be used as a conceptual framework. SET suggests that individuals will engage in exchanges if (a) the resulting rewards are valued, (b) the exchange is likely to produce valued rewards and (c) the perceived costs do not exceed the perceived rewards (Skidmore 1975; Jurowski, Uysal, & Williams, 1997). Residents will agree to make an exchange with tourists if the benefits that they receive exceed the costs. Those residents who can envision the results from tourism development and think that the costs do not exceed the benefits will favor the exchange and support tourism development (Jurowski, Uysal, & Williams, 1997).

Symbolic convergence theory (SCT) is a communications theory which explains how small and large groups develop a common consciousness. SCT describes the development, advancement, and deterioration of situations that lead to group consensus and provides a means of understanding group disagreements. Ernest Bormann first proposed SCT in 1970 to explain "the appearance of a common symbolic consciousness that contains, among participants, in a rhetorical community, shared meanings, emotions and motives for action" (Cragan & Shields, 1998). A rhetorical vision provides groups with a common symbolic reality that includes many fantasy themes and fantasy types. It helps group members understand the bigger picture and make sense of confusing situations. Rhetorical visions can be righteous, social or pragmatic. Righteous visions explain the proper and ethical way of doing things. Social visions depict the interpersonal or humanitarian motivation for action. Pragmatic visions portray an efficient or cost-effective reasoning behind decisions. The process of sharing fantasy themes creates a symbolic convergence among individuals (Cragan & Shields, 1998). SCT has not been used as a conceptual framework in earlier tourism research.

Figure 1
Support for Rural Tourism Development (Adapted from Gursoy, D., Jurowski, C., & Uysal, M., 2002)



A1 = employment opportunities; A2= investment ; A3 = more businesses; A4= revenue; A5= cultural activities; A6= cultural identity; A7= historical significance; A8= pressure on services ; A9= increased prices of goods; A10= increased prices of real estate; A11= traffic congestion; A12= trash and litter; B1= cultural attractions; B2= visitor services; B3= small businesses; B4= cultural events; B5= outdoor programs ; B6= promotion; C1= feeling at home ; C2= interest in the community; C3= attachment to the community; C4= community involvement; D1= environment; D2= schools; D3= crime; D4= recreation ; D5= culture; D6= economic development; E1= personal benefits; E2= economic benefits; E3= right thing; E4= socializing; E5=proximity to destination; E6= best destination; F1= job creation – local government; F2= job creation, federal government ; F3= keeping young people; F4= satisfaction; F5= bright future.

Figure 1 illustrates the proposed theoretical model developed for this study entitled Support for Rural Tourism (SRT). SRT is based on a synthesis of Borman's SCT and the SET model of Gursoy, Jurowski, and Uysal in 2002. The proposed model contains seven constructs and 39 variables. Citizens in the community are divided

into two groups; residents and decision makers. According to SCT citizens can have different ideas and perceptions (visions) about tourism development in their community. These righteous, social, and pragmatic visions affect citizens' concern for the community and their attachment to the community. Support for tourism development is based on citizens' perceptions about the costs, benefits, and state of the local economy. If the social, economic, and environmental tradeoffs, citizens have to make, are high for tourism development to occur then perceptions about tourism development will tend to be negative. If the tradeoffs are low, perceptions about tourism development will be positive. Social, economic, and environmental factors are the determinants of citizens' support or opposition to tourism development.

METHODOLOGY

The instrument for this study was adapted and modified from the instrument Gursoy, Jurowski, and Uysal (2002), which measured residents' support for tourism development. The original instrument examined the direct and/or indirect causal effects and the strength and direction of these effects. The questions were constructed in a five-point Likert scale format. There were 48 questions in the final modified survey divided into seven sections of questions formulated based on the six constructs comprising the "Support for Tourism Development" model – 1) Perceived Benefits and Perceived Costs; 2) Support for Tourism Development; 3) Community Attachment; 4) Community Concern; 5) Righteous, Social and Pragmatic Visions; 6) Perceptions of the Local Economy and a demographics section. The final version of the instrument was reviewed by a panel of faculty experts.

The research study was conducted using a census sampling procedure. The survey was mailed to all 1221 households in the community. A complete list with residents' names and addresses was provided by the city's tourism bureau. The cover letter explained the survey's purpose, completion time, due date, confidentiality clause, and incentive for completion. Respondents were asked to put their name and address on the return envelope if they wanted to be entered in a drawing for six \$50 gift certificates for those who returned the completed the questionnaire by the due date. Two weeks prior to the actual mail out of the survey all respondents were notified through an advertising interview on local cable television. Respondents were given two weeks to complete and return the survey.

The descriptive statistics employed were frequencies, means, and standard deviation. Factor analysis was computed in order to assess the factor structure and test for multicollinearity between the variables. Pearson's correlation (two-tailed) was used as another technique to determine the relationship between the constructs in the SRT model. Stepwise multiple regression analysis was used to determine which constructs predicted support for rural tourism development.

RESULTS

A total of 271 usable surveys were returned for a response rate of 22.19%. The participants were 55.7 % female and 44.3 % male; their ages ranged from 18 to 95 with 53 % of them being above 50 years of age. Over 81% of the participants were White/Caucasian, almost 15% were Hispanics, and less than 2% were African American. Most of the respondents (77.5%) were not born in the community. Household income levels of the respondents were high for the community: 67.5% had an income over \$40,000 and 22.1 % had an income of less than \$20,000.

Overall the results showed that residents had a positive attitude toward tourism development. Respondents agreed that tourism would have a very beneficial effect on the local economy and would help preserve the city's unique atmosphere. They felt that tourism would attract more investments ($M = 4.18$, $SD = .80$), contribute to the development of new businesses ($M = 4.31$, $SD = .73$), and create additional tax revenue ($M = 4.22$, $SD = .74$). Residents' biggest concern was that tourism would put pressure on local services ($M = 3.72$, $SD = 1.01$) and would increase the prices of real estate ($M = 3.49$, $SD = .93$). The respondents supported the development of different tourist facilities and small businesses like gift shops, antique stores, and retail shops ($M = 4.14$, $SD = .69$), hotels, restaurants ($M = 4.11$, $SD = .69$), cultural events ($M = 4.13$, $SD = .70$). There was agreement that the community needed stronger promotion as a tourist destination ($M = 4.10$, $SD = .78$). Results showed the majority of respondents were attached to their community and perceived it as their home ($M = 4.42$, $SD = .80$). Regardless of this, the respondents were not very active in the community and were not involved in organized activities ($M = 2.86$, $SD = 1.23$). They also showed a moderate level of concern about the environment ($M = 3.40$, $SD = .80$), the schools ($M = 3.57$, $SD = .82$), way of life ($M = 3.25$, $SD = .87$), and economic development ($M = 3.46$, $SD = .85$). Local residents demonstrated a level of concern about crime in their community ($M = 3.66$, $SD = .73$).

Prior to answering the three research questions, a factor analysis was computed in order to assess the factor structure and test for multicollinearity. Research questions One and Two were answered using Pearson's correlation. Research question Three was answered using stepwise multiple regression. In order to generate the factor structure, principal component analysis with a varimax rotation procedure was performed to identify the number of factors and their relative loadings. This procedure was performed for 33 survey items for a sample of 271 residents. The criteria for retention called for minimum eigenvalues greater than 1.0 and primary factor loadings greater than .60 with secondary loadings no greater than .40. According to Green and Salkind (2003), factors with eigenvalues higher than one should be considered as potential factors for the analysis. This method produced six factors (Table 1) – Perceived Benefits (7 items, $\alpha = .93$), Perceived Costs (5 items, $\alpha = .74$), Support for Tourism (6 items, $\alpha = .86$), Community Attachment (4 items, $\alpha = .78$), Community Concern (6 items, $\alpha = .87$), and Perceptions of the Local Economy (3 items, $\alpha = .74$). Two of the items measuring state of the local economy had loadings of less than .40 and were deleted from the original sample items because of nonsignificant loadings ($<.60$), leaving 31 items.

Table 1
Factor Analysis for Support for Tourism (N = 271)

Residents' Support	I	II	III	IV	V	VI
Jobs	.78					
Investment	.83					
Business development	.83					
Tax revenue	.78					
Cultural activities	.80					
Cultural identity	.81					
Building restoration	.76					
Pressure on services					.65	
Prices of goods					.66	
Price of real estate					.68	
Traffic congestion					.74	
Trash and litter					.72	
Historic attractions			.75			
Visitor services			.72			
Independent businesses			.76			
Cultural events			.81			
Outdoor recreation			.30			
Promotion			.74			
Home feeling				.84		
Interest				.69		
Regret				.81		
Involvement				.44		
Environment		.80				
Schools		.77				
Crime		.74				
Recreation		.75				
Way of life		.79				
Economic development		.79				
Local government						.84
State government					.86	
More jobs						.65
Cronbach alpha	.93	.87	.86	.78	.74	.74
Eigenvalue	8.48	3.45	2.89	2.41	1.96	1.55
Variance explained	25.7%	10.4%	8.7%	7.3%	5.9%	4.7%

Note. Items not loading not included: satisfaction with the community as a place to live, and bright economic future. Factor I: Perceived Benefits. Factor II: Community Concern. Factor III: Support for Tourism. Factor IV: Community Attachment. Factor V: Perceived Costs. Factor VI: Perceptions of Local Economy.

The same factor-analytic procedure was performed on the six items measuring residents' social, righteous, and pragmatic visions. Three factors were extracted in this analysis – Visiting with Relatives and Friends (1 item, $\alpha = .68$), Proximity of Location (1 item, $\alpha = .68$), Best Place for Leisure Time (1 item, $\alpha = .68$). The same criteria for retention were used, i.e., eigenvalues greater than 1.0 and primary factor loadings greater than .60 with secondary loadings no greater than .40. Three of the items measuring righteous, social, and pragmatic visions were not significant and did not load on any of the factors. These items were removed from the analysis. The items that had significant factor loadings were combined into one variable called Community Visions. To obtain a better understanding of the factors that might explain variations in residents' support for tourism development Pearson's correlation and stepwise multiple regression were performed to answer research question 1 and 2. Correlation coefficients were computed between the constructs in the SRT Model (Table 2). Seven variables were entered in the correlational analysis – perceived benefits of tourism, perceived costs of tourism, support for tourism, community attachment, community concern, community visions, and perceptions of the local economy.

Table 2
Correlations Among the Seven Constructs (N = 271)

	ST	PB	PC	CC	CA	CV
ST						
PB	0.50*					
PC	-0.14*	-0.02				
CC	0.20*	0.20*	0.01			
CA	0.21*	0.31*	-0.08	0.27*		
CV	0.26*	0.29*	0.10*	0.09	0.20*	
PLE	0.20*	0.31*	0.07	0.10*	0.28*	0.19*

* $p < .05$ Note. Support for Tourism – ST; Perceived Benefits – PB; Perceived Costs – PC; Community Concern – CC; Community Attachment – CA; Community Visions – CV; Perceptions of Local Economy – PLE;

Support for tourism was positively correlated with perceived benefits from tourism development. Residents believed that tourism would be very beneficial to the local economy and would increase their quality of life. Perceived costs of tourism development were significantly correlated in a negative direction with support for tourism development. If tourism was perceived as a very "costly" enterprise, then support for its development significantly decreased. These results were consistent with the results from previous research studies (Jurowski, Uysal, & Williams, 1997; McGehee & Andereck, 2004; Harambopoulos & Pizam, 1996). Another interesting finding was that residents' community visions for tourism development had a statistically significant relationship in a positive direction with the support for tourism development. The greater the symbolic visions of the local residents, the higher the support for rural tourism development. According to the symbolic convergence theory people with social rhetorical visions are friendly and would welcome tourists. People with pragmatic visions would perceive tourism as an efficient and cost-effective economic alternative. Residents with righteous visions would be very likely to perceive tourism as the best economic alternative because it is good for the entire community (Cragan & Shields, 1998). Support for tourism development had a statistically significant relationship in a positive direction with the level of community attachment of local residents. The more attached residents were to their community, the more likely they were to support tourism development. Community concern had a statistically significant relationship in a positive direction with support for tourism development. Residents who were more concerned about the environment, schools, crime, recreation/culture, and economic development were more likely to support tourism development than residents who were not concerned. The results also revealed that there was a statistically significant correlation in a positive direction between residents' perceptions of the state of the local economy and support for tourism development. Respondents who associated rural tourism development with new job opportunities supported its further development.

A stepwise multiple regression analysis was conducted to evaluate what items predicted support for tourism development and to answer research question 3. The predictors entered in the regression were perceived benefits, perceived costs, community concern, community visions, and perceptions of the local economy. The criterion variable was the overall support for tourism development in the community. The results from the analysis are shown in Table 3.

Perceived benefits of tourism had a positive relationship with the dependent variable (support for tourism development) and was the most important factor in the model ($\beta = .415$). It alone accounted for 25 % of the variance in the dependent variable. As residents' perceptions of the benefits from tourism increased, their level of support for tourism also increased. Conversely, as perceived costs of tourism increased, the level of residents support for tourism development decreased ($\beta = -.192$). These findings are consistent with findings from previous research studies (Gursoy, Jurowski, and Uysal, 2002; McGehee and Andereck, 2004; Harambopoulos & Pizam, 1996). The regression analysis also indicated that when community visions (social, righteous, and pragmatic) for tourism increased, support for tourism development also increased ($\beta = .189$). Residents who demonstrated greater levels of concern for their community were more supportive of tourism development ($\beta = .121$). A further examination of the results showed that community visions, perceived costs, and community concern added 5 % of the variance in support for tourism. The results from the stepwise regression analysis showed that support for tourism was predicated on four variables: perceived benefits of tourism, perceived costs of tourism, community visions, and community concern.

Table 3
Results of Stepwise Multiple Regression Model for Support of Tourism Development (N = 271)

Predictor Variables	<i>Beta</i>	<i>R</i>	<i>R</i> ²	<i>R</i> ² Change	<i>p</i>
Step 1 Perceived Benefits	0.41	0.50	0.25	0.25	0.000
Step 2 Perceived Costs	-0.19	0.51	0.26	0.01	0.010
Step 3 Community Visions	0.19	0.53	0.28	0.02	0.010
Step 4 Community Concern	0.12	0.54	0.30	0.02	0.047

A theoretical contribution of the study is that the results supported the importance of the social exchange theory in explaining residents' support for tourism. Two of the constructs that predicted support for tourism were perceived benefits and perceived costs. These constructs were influenced by the residents' perceptions of costs and rewards and perceptions of the local economy. It was found that support for tourism was heavily dependent on the community's perceptions of economic benefits and wellbeing. Residents were willing to support tourism if it was beneficial to the local economy, but they were unwilling to support tourism development if the costs were significant.

Another important theoretical contribution of the study was the integration of the symbolic convergence theory principles in measuring residents' support for tourism. It was found that increased community vision for tourism was positively correlated with support for rural tourism development. The analysis showed that increased community visions were directly related to stronger support for tourism. Community concern is the last significant predictor variable for support for tourism development. Residents who displayed greater concern for the environment, schools, crime, recreation/culture, and economic development were more supportive of tourism development.

CONCLUSIONS

Three research questions in this study inquired about residents' support for tourism. These questions asked about the importance of costs, benefits, and community vision as predictors of that support. Residents eagerly supported tourism development as long as the costs associated with it were not high. Residents who were attached to the community were also concerned about the community. These people were more likely to support tourism development. People who were attached to the community supported tourism because it would create more jobs. The benefit of more jobs meant that young people would stay in the local community. Perceived benefits were the major predictor of support for tourism development.

Community visions were correlated with perceived benefits, community attachment, and support for tourism. This may be important because it suggests that support for tourism emanates from people who are vested in their community and understand the importance of benefits to the community wanted from different perceptions. People with different perspectives can still share a common vision for the betterment of their community through tourism development. Residents are not sure about their community vision for the support of tourism. They support tourism because of the benefits that they believe are associated with becoming a tourist destination. They do not see

the costs as prohibitive compared to the benefits. The residents of the community wanted tourism development to occur but they do not understand how it needs to be accomplished. Community residents need leadership and guidance to become a tourist destination.

This study is not without its imperfections and limitations. The findings cannot be generalized to all rural communities. The study was conducted in a small rural community that did not have a well developed tourism industry. Therefore, the results may differ from other rural communities in the US, where tourism plays a major role.

Local residents' support for tourism is an essential requirement for the success of any tourist destination. The proposed model may be utilized by tourism planners in assessing communities' support for tourism development in different rural areas. It is very important for tourism planners to develop strategies that match the overall host community vision. A unified community vision will help rural communities develop a unique identity as a tourist destination.

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**EXPLORING THE RELATIONSHIP BETWEEN JOB SATISFACTION AND DEMOGRAPHICS: A
STUDY OF HOTEL MANAGERS IN TURKEY**

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ABSTRACT

This study examines the relationship between demographic characteristics of middle level hotel managers and job satisfaction. The sample of the study was 103 middle level hotel managers in 17 four and five star hotels in Kusadasi, Turkey. Study findings indicated that there were significant differences between demographic variables of middle level hotel managers and five job satisfaction dimensions (degree of satisfaction with the work, co-workers, supervision, total pay, and promotional opportunities).

Key Words: demographic characteristics, job satisfaction, middle level hotel managers

INTRODUCTION

There is a considerable amount of research suggesting that customer contact employees have tremendous impact on customers' perceptions of service quality and on customer satisfaction (Testa, Skaruppa and Pietrzak, 1998; Brown and Peterson, 1994; Heskett et al., 1994). Since hotel industry is a human-oriented industry, it is crucial for hotel management to know how their employees feel at work and what they want. Tutuncu and Kozak (2007) stated that the measurement of job satisfaction and identifying its predictors is of particular importance in the hotel industry because employees' dis/satisfaction with the business might also lead to customer dis/satisfaction with the services provided (DeFranco and Schmidgall, 2000).

Job satisfaction in tourism industry has been investigated by many researchers. Studies have focused on the relationship between job satisfaction and organizational culture (Tepeci and Bartlett, 2002); customer satisfaction (Testa, Skaruppa and Pietrzak, 1998); labor turnover (Wasmuth and Davis, 1983; Hogan, 1992; Tutncu and Kozak, 2007); job attributes (Qu, Ryan and Chu, 2001); organizational commitment (Murray, Gregoire, and Downey, R, 1991). Despite these researches, there are few empirical studies investigating the relationship between employees' satisfaction levels and demographic characteristics with particular attention to the hospitality industry. The purpose of this study was to identify the relationship between demographic characteristics of middle level hotel managers and their job satisfaction level. For this purpose the following research questions were explored.

1. Is there any relationship between middle level hotel managers' demographic characteristics and degree of satisfaction with the work?
2. Is there any relationship between middle level hotel managers' demographic characteristics and degree of satisfaction with co-workers?
3. Is there any relationship between middle level hotel managers' demographic characteristics and degree of satisfaction with supervision?
4. Is there any relationship between middle level hotel managers' demographic characteristics and degree of satisfaction with total pay?
5. Is there any relationship between middle level hotel managers' demographic characteristics and degree of satisfaction with promotional opportunities?

Jab Satisfaction

Locke (1969) defined job satisfaction as “the pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating the achievement of one’s job values”. Job satisfaction is a feeling of ease on a continuum in the context of role responsibility (Vroom, 1964). Porter and Lawler (1968) suggested that job satisfaction should be determined by the difference between the actual gain of an individual at work and what one should gain from one’s own viewpoint (Lund, 2003). The term job satisfaction is considered an attribute that exists as the equity of a variety of desired and non-desired job-related experiences. It is also defined as the degree of fit between the features of a job and employees’ expectations. From this point of view, job satisfaction appears if expectations are met or fulfilled; otherwise, dissatisfaction would be the outcome of any working experience (Tutuncu and Kozak, 2007).

Job satisfaction has been widely studied and measured in different ways in the human resource management literature. Scholars have suggested different motivational factors and individual characteristics which are significant determinants of job satisfaction (Locke 1969, DeSantis and Durst, 1996, Ellickson and Logsdon, 2001, Scarpello and Champell, 1983). Wright and Kim (2004) stated that job characteristics such as career development support, job specificity, participation, task significance, and feedback are primary factors in job satisfaction. Other researchers view that job satisfaction is a result of both employees’ expectations and aspirations and their existing status, or as multidimensional attitudes towards their jobs and working places (Hamermesh, 2001; Clark and Oswald, 1996). From this argument, it seems reasonable that the level of job satisfaction changes based upon working conditions, demographic characteristics, and expectations in the future career or the type of work being carried out (Tutuncu and Kozak, 2007). DeSantis and Durst (1996) suggested four major sets of determinants of job satisfaction including personal characteristics, monetary and nonmonetary rewards, work environment characteristics and job characteristics. Smith, and Hulin (1969) stated that there are five dimensions that represents the most important characteristics of a job. These are; (1) The work itself (the extent to which the job provides person with interesting tasks, opportunities for learning, and chance to accept responsibility), (2) Pay (the amount of financial remuneration that is received and the degree to which it is perceived as equitable in comparison to that of others), (3) Promotion opportunities (prospects of advancement in the organization), (4) Supervision (the competencies of the supervisor to provide technical assistance and behavioral support), and (5) Co-workers (the extent to which fellow workers are technically competent and socially supportive).

The Relationship between Demographics and Job Satisfaction

Previous studies have shown that demographic characteristics have significant affect on job satisfaction (Loscocco and Roschelle, 1991; Warr, 1990; Rhodes, 1983; Shott, Albright and Glennon, 1963). According to Loscocco and Roschelle (1991) situational and specific individual characteristics influence job satisfaction. Situational characteristics include job characteristics, organizational characteristics, and promotion opportunity while Individual characteristics include personality, education, gender, and family roles (Hackman and Oldham, 1980).

A study which is conducted by Jung, Moon, and Hahm, (2007) indicated that there is a gender effect on job satisfaction, particularly for wages and work environment. Wild (1970) studied job satisfaction of 2159 female workers and 236 female ex-workers of electronic companies, and reported that job dissatisfaction was more prevalent among single workers. Shea, Paines and Spitz (1970) found that marital status seems to have little influence on job satisfaction. Both married and non-married women in both black and white groups expressed the same degree of satisfaction with their jobs.

Mottaz (1987) investigated the relationship between age and overall work satisfaction. The data from 1,385 workers representing a variety of different occupational groups suggest that age has an indirect positive effect on work satisfaction through its relationship to work rewards and values. Sinha and Agarwala (1971) reported that the older employees are significantly more satisfied than the younger employees. Durst and DeSantis (1997) studied the relationship between age and job satisfaction and their findings indicated that there is a U-shaped and positive relationship between age and job satisfaction. The U-shaped relationship suggests that job satisfaction declines in an initial stage and then rises as employees get older (Jung, Moon, and Hahm, 2007). Durst and DeSantis (1996,) believed that this relationship may be a reflection of job turnover, with unsatisfied employees leaving their positions to find more satisfying employment (Jung, Moon, and Hahm, 2007). A second view that consider a positive relationship between job satisfaction and age, which suggests that older employees may have more realistic

expectations about their jobs and a stronger sense of achievement than younger employees do (DeSantis and Durst, 1996; Durst and DeSantis, 1997).

Some studies which investigated the relationship between employee satisfaction and education level failed to find a strong positive relationship between these two variables (Vollmer and Kinney, 1955; Sheppard and Herrick, 1972). Glenn and Weaver (1982) stated that “A probable reason for the lack of a strong positive relationship is that education can have important negative as well as positive effects on job satisfaction; to the extent that education increases job expectations and aspirations more than it increases ability to attain, it is likely to contribute to dissatisfaction with work. For instance, it would seem that college-educated persons who must take jobs which do not require a college education should tend to be less satisfied with those jobs than they would have been if they had not gone to college” (p.47).

Studies also indicated that an employee's satisfaction with an organization is also closely related to length of service (Smith, Gregory and Cannon, 1996; Gibson and Klein, 1970; Hulin and Smith, 1965). Smith, Gregory and Cannon (1996) stated that there was a significant difference in overall job satisfaction based on tenure in companies in the hospitality industry. Higher satisfaction levels of new employees with less than six months of employment were found which might be related to the pleasure of obtaining a new job. Overall satisfaction drops for employees of more than six months, and the greatest level of job turnover occurs during this period (Lam, Zhang and Baum, 2001).

METHODOLOGY

Instrument

A self-administered, closed-ended questionnaire was used to collect the data of this study. The questionnaire comprised of two sections. The first section of the questionnaire was to attempt to identify the demographic characteristics of the respondents. With the second section of the questionnaire middle level hotel managers' job satisfaction level was measured.

Job satisfaction scale which was consisted of five items was adopted from Wright and Cropanzano (1998). Each item measured a dimension of satisfaction construct: degree of satisfaction with the work, co-workers, supervision, total pay, and promotional opportunities. Respondents indicated their levels of agreement with the 5 job satisfaction item by using a 5-point Likert type scale ranging from 5= strongly agree to 1= strongly disagree. Cronbach's Alpha was calculated to test the reliability of each factor. The results showed that the alpha coefficients for all job satisfaction dimensions ranged from 0.63 to 0.80, well above the minimum value of 0.5 as an indication of reliability (Nunnally, 1994).

Sampling, Data Collection and Data Analysis

The sample of the study was 103 middle level hotel managers in 17 four and five star hotels in Kusadasi, Turkey. The survey was conducted in Summer 2006. To increase the response rate, the questionnaires were distributed to the managers by hand. A total of 103 questionnaires were distributed by using a convenience sampling method. Ninety four questionnaires were returned for a % 91 response rate.

Data of this study were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics were first computed. ANOVA was used to identify if there was a significant difference in the job satisfaction level of middle level hotel managers by gender, age, education, department, length of service in the current company and length of service at the current position.

RESULTS

Participants consisted of different socio-demographic characteristics (Table 1). Male participants (70%) were more than female (30%) participants. Most of the participants were between the ages of 31-40 (48%). Forty eight percent of the participants were high school graduate, and 40% of the participants had a bachelor's degree. Twenty nine percent of the participants had more than 9 years, 23% of the participants had 1 to 3 years of experience in their current hotel. While 22% of the participants had more than 9 years of experience in their current position, 11% of the participant had 5 to 7 years of experience in their current position.

ANOVA was used to identify if there was a significant difference in the 5 job satisfaction items (degree of satisfaction with the work, co-workers, supervision, total pay, and promotional opportunities) by gender, age,

education, department, length of service in the current hotel and length of service at the current position. ANOVA indicated that there were significant differences in satisfaction with promotional opportunities by age, in satisfaction with supervision by length of service in the current company, and in satisfaction with total pay by education level ($p < .05$) (Table 2).

Table 1
Socio Demographic Variables

Socio Demographic Variables	n	%
Gender		
Male	65	69.1
Female	29	30.9
Total	94	100
Age		
20-25	13	14.1
25-30	20	21.7
31-40	44	47.8
41 and older	15	16.3
Missing Value	2	0.1
Total	94	100
Education		
High School	45	47.9
Community College	10	10.6
Bachelor	37	39.4
Graduate	2	2.1
Total	94	100
Length of Service in the Current Hotel		
Less than 1 year	10	10.6
1-3 years	22	23.4
3-5 years	13	13.8
5-7 years	13	13.8
7-9 years	9	9.6
More than 9 years	27	28.7
Total	94	100
Length of Service at the Current Position		
Less than 1 year	9	9.6
1-3 years	31	33
3-5 years	16	17
5-7 years	10	10.6
7-9 years	7	7.4
More than 9 years	21	22.3
Total	94	100
Department		
Front Office	15	16
Service	8	8.5
Housekeeping	6	6.4
Accounting	19	20.2
Kitchen	13	13.8
Food and Beverage	27	29.7
Other	6	6.4
Total	100	100

Tukey post hoc analysis was conducted comparing the four group means for age, six group means for length of service in the current hotel, and four group means for education level. Tukey analysis indicated that middle level hotel managers who were in the ages between 31 and 40 were more satisfied with the promotional

opportunities than who were in the ages between 20 and 25. In addition Tukey analysis revealed that middle level hotel managers who had 5 to 7 years of experience in the current company were more satisfied with supervision than who had less than 1 year experience in the current company. Finally, Tukey analysis also indicated that middle level hotel managers who had bachelor's degree were more satisfied with total pay than who had high school degree.

Table 2
Overall Scores on Job Satisfaction Items by Demographic Variables

Sociodemographic Variable	Work	Co-workers	Supervision	Total Pay	Promotional Opportunities
Age					
20-25	4.75(.452)	4.50(1.59)	4.08(.793)	2.92(1.62)	2.67(1.30) 3.40(.883)
25-30	4.40(.503)	3.85(1.38)	4.00(.459)	2.75(.910)	3.75(1.05)
31-40	4.43(.661)	4.16(.745)	3.98(.762)	2.86(1.33)	3.20(1.42)
41 and older	4.33(.617)	4.20(.775)	3.87(.990)	3.33(.976)	3.240*
<i>F</i>	1.254	2.005	.192	.709	
Length of Service in the Current Hotel					
Less than 1 year	4.20(.422)	3.70(.675)	3.80(.789)	3.30(1.05)	2.90(.994)
1-3 years	4.45(.569)	4.18(.664)	4.14(.710)	3.33(1.39)	3.45(1.22)
3-5 years	4.42(.515)	4.25(.622)	4.17(.577)	3.00(.953)	3.75(.754)
5-7 years	4.62(.506)	4.15(.801)	4.23(.599)	2.54(1.33)	4.00(.913)
7-9 years	4.33(.707)	4.00(.866)	3.33(.707)	2.22(.972)	2.78(1.39)
More than 9 years	4.52(.700)	4.30(.823)	3.93(.781)	2.89(1.21)	3.44(1.21)
<i>F</i>	.681	1.048	2.348*	1.552	1.889
Education					
High School	4.62(.513)	4.47(.521)	3.75(.707)	3.12(2.32)	3.29(1.18)
Community College	4.56(.527)	4.00(.866)	4.00(1.00)	2.11(.928)	3.78(.833)
Bachelor	4.27(.693)	4.11(.699)	3.89(.614)	2.56(.939)	3.14(1.15)
Graduate	4.50(.707)	4.00(.000)	4.50(.707)	4.00(1.41)	4.50(.707)
<i>F</i>	1.221	1.207	1.611	3.721*	2.00

Note: Standard Deviations are in parentheses. Satisfaction scores are coded on a 5 point Likert type scale ranging from 1 = strongly disagree to 5 = strongly agree. *Significant at .05 level.

CONCLUSIONS

The purpose of this study was to identify the relationship between demographic characteristics of middle level hotel managers and job satisfaction. Job satisfaction scale which was consisted of five items was used to measure middle level hotel managers' job satisfaction level. Each item measured a dimension of satisfaction construct which are degree of satisfaction with the work, co-workers, supervision, total pay, and promotional opportunities.

Findings from the study indicated that there was a significant difference in middle level hotel managers' satisfaction level by age. More specifically study indicated that middle level hotel managers who were in the ages between 31 and 40 were more satisfied with the promotional opportunities than who were in the ages between 20 and 25. Overall, this finding coincides with the literature indicating that the older employees have more realistic expectations about their jobs and a stronger sense of achievement than younger employees do (DeSantis and Durst, 1996; Durst and DeSantis, 1997). Therefore hotels should pay more attention and put more efforts on training and development for employees to improve their promotional prospects.

The results of the study also indicated that satisfaction with supervision differed by middle level hotel managers' length of service in the current hotel. Findings revealed that middle level hotel managers who had 5 to 7 years of experience in the current hotel were more satisfied with supervision than who had less than 1 year of experience. This result may indicate new managers have some difficulties to establish a good communication with their senior executives. In addition, new managers may not have lot of opportunities to involve decision making process. Studies indicated that high degree of job involvement and decision making at work increase satisfaction

level of employees (Hechanova, Alampay and Franco, 2006; Van Oudtshoorn and Thomas, 1993). Therefore, hotels may consider providing higher degree of job involvement and decision making atmosphere for their middle level managers to increase job satisfaction and reduce turnover rate.

Significant relationship was found in satisfaction with total pay by middle level hotel managers' education level. Results indicated that when middle level hotel managers' education level increased their satisfaction level with total pay increased. This finding was not supported by the literature. Studies which have related amount of education to job satisfaction have consistently failed to find a strong positive relationship (Vollmer and Kinney, 1955; Sheppard and Herrick, 1972). However, this finding suggests that hotels prefer to pay more to middle level hotel managers who are more educated. Therefore, hotel management may consider payment as a satisfaction factor for well educated managers.

In conclusion, the findings of this study indicated that there were significant differences between some of the demographic characteristics of middle level hotel managers and 5 job satisfaction dimensions. It is hoped that these findings will help top hotel management to decrease the rate of turnover and enhance the level of job satisfaction.

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THE FIRM GROWTH PATTERN IN THE RESTAURANT INDUSTRY: DOES GIBRAT'S LAW HOLD?

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ABSTRACT

This study tests the relationship between firm size and rate of growth, based on Gibrat's Law. The core idea of Gibrat's Law is that firm growth rates should be independent of firm size. The minimum efficient scale (MES) of level of output and merger and acquisition (M&A) are also considered in analyzing the relationship. Overall, this study shows that Gibrat's Law does not hold in the restaurant industry. Firm growth patterns reveal that small firms are expected to grow faster than their larger competitors. However, larger firms grow faster when they remain below MES, whereas smaller firms show higher growth rates when they are operated at a point above MES. Firms executing M&A show that firm growth rate is independent of firm size, supporting Gibrat's Law. This study does not evidence persistent growth after M&A for those firms above MES. Nevertheless, M&A is still an effective growth strategy for those who are below MES.

Key Words: firm growth; Gibrat's Law; restaurant firms; M&A; minimum efficient scale

INTRODUCTION

Firm growth has been considered one of the most important strategic objectives for a firm, contributing to its survival and competitiveness. In relation to firm growth, Gibrat (1931) proposed that growth is independent of firm size, which is referred to as 'Gibrat's Law.' Empirical studies have generally provided evidence that Gibrat's Law has often been rejected by previous researchers (Evans, 1987; Hall, 1988; Dunne & Hughes, 1994; Hart & Oulton, 1996; Wilson & Morris, 2000; Esteves, 2007). Nevertheless, some empirical studies have claimed that Gibrat's Law holds for some industries (Audretsch et al., 2004; Geroski & Machin, 1993; Pfaffermayr & Bellak, 2000). Audretsch et al. (2004) criticized most of the previous research for being based on a limited scope of industries. They tested Gibrat's Law using the Dutch small-scale service industry and found that the growth rate was independent of firm size. Piergiovanni et al. (2002) stated that Gibrat's Law held in two business groups (cafeterias and camping sites), but rejected for three other groups (hotels, restaurants, and cafes) in Italy. If firm growth is independent of firm size and the growth rate is random, the benefit from economy of scale and the effect of MES (Minimum Efficient Scale) are questionable. Therefore, to check whether Gibrat's Law holds or not and to identify firm growth patterns according to firm size is an important task for managers as well as investors to understand the logic for strategic decisions on growth.

M&A (Merger and Acquisition) is also one of the most effective instruments for firm growth. According to the 2005 Chain Restaurant M&A Census, main reasons for sales of firms included divestiture (53.9%) and financial trouble (19.1%). On the other hand, primary reasons for acquiring other firms were new concept development or diversification (37.4%) and expanding franchise area (21.7%). It is clear that restaurant companies develop new concept restaurants and reduce business risk by diversification through M&A. Besides, these firms intend to strengthen market power by expanding their franchise area. From 1995 to 2000 in particular, M&A was hotly announced and conducted in the U.S. restaurant industry. Accordingly, the influence of M&A on the relationship between firm size and firm growth is important in order to understand the growth patterns of restaurant firms.

Despite the importance of this topic, little effort has been made to verify the growth pattern of firms in the hospitality industry. Therefore, the objectives of this study are ¹⁾ to investigate whether Gibrat's Law of proportional growth holds for the restaurant industry and ²⁾ to test the relationship of MES (Minimum Efficient Scale) and M&A to firm growth. The results of this study are expected to contribute to a better understanding of restaurant firm growth patterns and MES and M&A in association with restaurant firm growth. Thus, this study can be useful to managers in devising better managerial strategies to grow firms and to investors in making investment decisions about restaurant firms.

LITERATURE REVIEW

Gibrat's Law and Firm Growth Pattern

Gibrat (1931) argued that firm size is determined by a first-order integrated growth process in which firm growth rates are independent, identically distributed random variables. Consequently, in logarithmic terms firm size is equal to the logarithm of its initial size plus the sum of its growth rate since birth (Geroski, 1995; Sutton, 1997; Caves, 1998). However, Gibrat's Law has often been rejected by previous researchers (Evans, 1987; Hall, 1988; Dunne & Hughes, 1994; Hart & Oulton, 1996). Wilson & Morris (2000) and Esteves (2007) also provided evidence that Gibrat's Law is not valid for various parts of the manufacturing industry. On the other hand, Audretsch et al. (2004) criticized most of the previous research for being based on a limited scope of industries. They tested Gibrat's Law using the Dutch small-scale service industry and found that the growth rate was independent of firm size.

Audretsch et al. (2004) explained that these discrepancies might be caused by the difference in industrial structure between manufacturing and service industries. In the manufacturing industry, small firms exist at a disadvantage due to economy of scale, while small firms in the Dutch service industry do not reveal this to be the case. The sample of Dutch service firms in Audretsch et al. (2004) consisted of very small firms, because in general the Dutch hospitality industry is composed largely of family-owned and small independent businesses. Therefore, every small firm in the Dutch hospitality industry is likely to operate at the MES (Minimum Efficient Scale) level. Consequently, there is no disadvantage due to small size. The results of Audretsch et al. (2004), however, may not hold for the U.S. restaurant industry due to the difference of industrial composition. Large chain and franchising business are common characteristics in the U.S. restaurant industry and publicly traded restaurant firms should be larger in size than the Dutch sample used by Audretsch et al. (2004). Therefore, it is difficult to consider that the result of testing Gibrat's Law in the U.S. restaurant industry is the same as what Audretsch et al. (2004) found the Dutch hospitality industry.

Minimum Efficient Scale and Firm Growth Pattern

MES (Minimum Efficient Scale) means a situation in which the economies of scale for a business or industry have been fully exploited. Thus, MES could be defined as the business scale at which a firm's long-run average cost curve stops falling. If MES is relatively small compared to total market size, many small companies can co-exist in the same industry. If MES is large because of the high ratio of fixed costs to variable costs, only a few major players tend to dominate the industry. Accordingly, there exist diseconomies of scale below the minimum efficient scale. When the output of a firm rises from a point below the MES, the firm becomes more efficient and experiences increasing economies of scale. Thus, there must be a pressure to grow until a firm has reached the MES. Often, a firm's growth through M&A is considered to be an effective way of achieving the MES. Simon and Bonini (1958) argued that expected growth was independent of firm size only if a firm is larger than the MES. Along the same line, Lotti et al. (2003) found that Gibrat's Law fails to hold for small firms in the years immediately following start-up, while the Law applies once they achieve a size large enough to overcome the MES. Therefore, Gibrat's Law may not be applied without considering industrial heterogeneity and the scale of firm size distribution.

In the previous literature, two different reasons for rejecting Gibrat's Law emerged. First, small firms grow faster than their larger competitors, which has been supported by Evans (1987) and Dunne & Huges (1994). This negative relationship between firm size and firm growth accounts for the efficiency and organizational flexibility of large firms. That is, as a firm grows large, it could lose organizational efficiency and flexibility. Accordingly, it is difficult to grow large firms faster than small firms. Second, large firms can grow faster than their small competitors, indicating a positive relationship between firm size and firm growth. Samuels (1965) and Prais (1976) have supported this view. This positive relationship can be justified by economy of scale and market power. Usually, large firms are considered to have achieved minimum cost of production, thus taking advantage of economy of scale and having stronger market power and competitiveness than their smaller competitors.

A few methods have been used to estimate the MES: engineering estimate method (Scherer, 1973), survivor method (Sving, 1961; Stigler, 1958) and relative size method (Fritsch, 2007). Usually, engineering estimate method has had difficulties in obtaining data. The survivor method can be used for a wider range of industries, but the difficulty of the method is in having comparable data for past years as well. Thus, this study estimated the MES through fitting the ratio of costs to firm size and firm size based on total assets and sales of 1995.

M&A and Firm Growth

M&A is one effective firm growth strategy. The benefit of M&A is that firms can rapidly reach the point of MES and take advantage of the growing economy of scale. Another benefit is that firms can get stronger market power through M&A. In other words, a firm can strengthen its power to control market price and to negotiate with suppliers. According to the Chain Restaurant M&A Census, the total number of M&As in the U.S. restaurant industry from 1998 to 2000 were 174, 115, and 132, respectively (J.H. Chapman Group, 2001). The Census revealed that U.S. restaurant firms use M&A as an effective strategy to find new concept restaurants and reduce business risk through diversification. The second major reason for M&A is to expand franchise area, which is related to geographical diversification and market power.

The role of M&A in firm growth is critical to understanding the relationship between firm size and firm growth. Depending on whether growth is due to M&A or not, the nature of the growth could be different. A recent study for the hotel industry indicated that larger firms have a tendency to become even larger through M&A (Hsu & Jang, 2007). Nevertheless, there has been little effort toward investigating M&A in relation to firm growth in the restaurant industry. This study incorporated M&A into the relationship between firm size and firm growth in the restaurant industry.

METHODOLOGY

Research Hypotheses

Hypothesis 1: Firm growth is independent of firm size.

Hypothesis 2: Firm growth patterns are different depending on the MES level.

Hypothesis 3: Firm growth patterns are different depending on M&A status.

Hypothesis 4: Firm growth patterns are different depending on both the MES level and M&A status.

Figure 1

Fitting Result for Total Assets

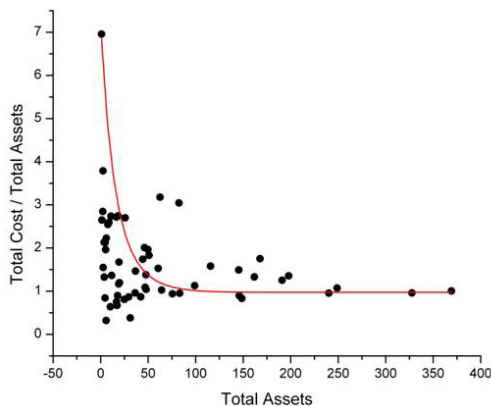
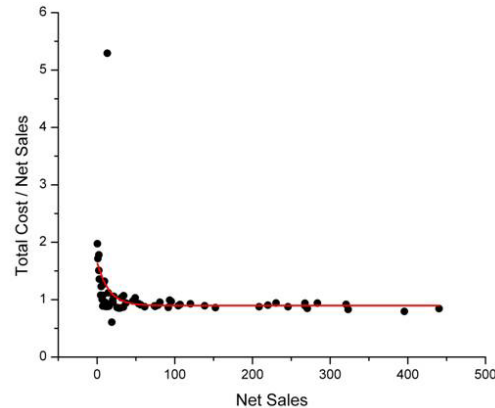


Figure 2

Fitting Result for Net Sales



Data and Variables

The data used in this study was collected from COMPUSTAT and SDC Platinum using the SIC 5812 (eating places). The data covers fiscal year 1995 to 2005. Firm size variable, total assets, and net sales were obtained from COMPUSTAT. M&A information was obtained from the SDC Platinum database. As done in Chesher (1979), Gibrat's Law is tested as "the probability of a given proportionate change in size during a specified period is the same for all firms in a given industry regardless of their size at the beginning of the period." Therefore, we screened and deleted firms that did not exist in 1995 (beginning period) and appeared after 1996. MES is the minimum point of long-run average cost curve, which is including fixed and variable costs. In order to estimate MES, we sum up costs of goods sold and selling, general and administrative expenses of 1995, which are proxy variables for variable and fixed costs respectively. And then we divided this total cost by total assets and sales respectively. We fitted the ratio of total cost to firm size and firm size variable using Origin 7.0 Pro. For total assets, MES was 294.2521

million dollars, and 201.6549 million dollars for sales. Based on the result, we classified the sample into two MES groups.

Models

To test persistent growth, we followed Chesher's (1979) method. The basic tenet underlying Gibrat's Law is that the growth rate of a given firm is independent of its initial size at the beginning of the examined period.

$$z_{t,i} = \beta z_{t-1,i} + \varepsilon_{t,i} \quad (1)$$

where t is an index for time, i is an index for the firm, and $z_{t,i}$ is the deviation of the logarithm of the size of firm from the mean of logarithm of size of firms at time t , and ε is error term. Thus, if Gibrat's Law holds and firm growth rates are random walk of firm size, the parameter β should be equal to unity (one). If $\beta \leq 1$, however, it means that small firms grow faster than their larger competitors. On the other hand, if $\beta \geq 1$, it signifies that large firms grow faster than their smaller counterparts.

Equation (1) assumes that $\varepsilon_{t,i}$ is serially uncorrelated. If $\varepsilon_{t,i}$ is serially correlated, firm growth rate in one period depends on the growth rate in the preceding period. Thus, Gibrat's Law can be rejected even when β is equal to one. Assuming a firm order autoregressive process for $\varepsilon_{t,i}$,

$$\varepsilon_{t,i} = \rho \varepsilon_{t-1,i} + v_{t,i} \quad (2)$$

where $v_{t,i}$ is assumed to be non-serially correlated. Expressing $\varepsilon_{t,i}$ and $\varepsilon_{t-1,i}$ in terms of $z_{t,i}$, $z_{t-1,i}$, and $z_{t-2,i}$ respectively,

$$z_{t,i} = (\beta + \rho) z_{t-1,i} + (-\beta \rho) z_{t-2,i} + v_{t,i} \quad (3)$$

We used the non-linear regression procedure by Marquardt (1963) to obtain asymptotic standard errors for β and ρ . Gibrat's Law was considered to be valid if the joint hypotheses $(\beta \rho) = (1 \ 0)$ are accepted. Assuming that the estimators of β and ρ are asymptotically normally distributed, the test statistic for the joint hypothesis was asymptotically chi-squared distribution with two degrees of freedom.

RESULTS

The estimation result of Equation (3) for the total sample is shown in Table 1. Asymptotic likelihood ratio test results for joint hypothesis $(\beta \rho) = (1 \ 0)$ were significant for total assets and net sales. Overall, the results show that Gibrat's Law was rejected in the restaurant industry. The parameter β was less than one, signifying that small firms are expected to grow faster than larger competitors.

Table 1
Empirical Result of Total Sample for Eq. $z_{t,i} = (\beta + \rho) z_{t-1,i} + (-\beta \rho) z_{t-2,i} + v_{t,i}$

Variable	Parameter	Estimate	Standard Error	χ^2	Adj. R ²
Assets	β	0.993785	0.0070	90.3**	0.9761
	ρ	0.210772	0.0316		
Sales	β	0.993809	0.0090	149.32**	0.9713
	ρ	0.323062	0.0377		

*p<0.05, **p<0.01

Table 2 demonstrates that growth patterns are different depending on MES levels. Parameter β of firms with less than one in MES was greater than one, which means that within the firms below the MES the relatively larger firms are expected to grow faster than smaller firms. In other words, smaller firms suffered from diseconomy of scale below the MES. Even though a firm operates below the MES, the firm took advantage of the economy of scale if it increased in size. On the other hand, for firms above the MES, relatively smaller firms grew faster than

their larger counterparts. That is, when a firm operates above the MES, the firm could show a slower growth rate as it increased its business size.

Table 2
Empirical Result of Size Effect for Eq. $z_{t,i} = (\beta + \rho)z_{t-1,i} + (-\beta\rho)z_{t-2,i} + v_{t,i}$

Variable	^b MES	Parameter	Estimate	Standard Error	χ^2	Adj. R ²
Assets	Below	β	1.014597	0.0097	56.83**	0.9568
		ρ	0.168265	0.0355		
	Above	β	0.967971	0.0083	162.29**	0.9801
		ρ	0.430696	0.0690		
Sales	Below	β	1.019546	0.0139	72.07**	0.9269
		ρ	0.263812	0.0484		
	Above	β	0.967713	0.0078	393.34**	0.9844
		ρ	0.523871	0.0468		

*p<0.05, **p<0.01

Table 3
Empirical Result of M&A Effect at time t and t-1 for Eq. $z_{t,i} = (\beta + \rho)z_{t-1,i} + (-\beta\rho)z_{t-2,i} + v_{t,i}$

Var.	M&A	Param.	time t			time t-1		
			Estimate (SE)	χ^2	Adj. R ²	Estimate (SE)	χ^2	Adj. R ²
Assets	No	β	0.993829 (0.00705)	98.61**	0.9789	0.998488 (0.00749)	131.42**	0.9784
		ρ	0.224989 (0.0323)			0.261411 (0.0325)		
	Yes	β	0.987804 (0.0371)	2.28	0.9143	0.9702 (0.0249)	3.87	0.9470
		ρ	0.128152 (0.1283)			-0.03478 (0.1121)		
Sales	No	β	0.996433 (0.00920)	128.88**	0.9717	0.996002 (0.00946)	133.39**	0.9712
		ρ	0.31489 (0.0395)			0.324484 (0.0400)		
	Yes	β	0.956798 (0.0399)	22.78**	0.9558	0.970433 (0.0302)	17.45**	0.9655
		ρ	0.39331 (0.1323)			0.314718 (0.1143)		

*p<0.05, **p<0.01

Table 3 shows the result of Equation (3). For firms with M&A, the growth in total assets was independent of firm size at time t as well as $t-1$, supporting Gibrat's Law. In the case of net sales, however, firms with M&A showed that growth was related to firm size, rejecting Gibrat's Law. Based on Table 3, it was important to consider the role of M&A in examining the growth pattern of total assets. The result in Table 3 means that small restaurant firms grow faster if they are without M&A but growth pattern is not related to firm size when firms are after M&A. Regardless of M&A status, the β was significant and less than one, suggesting that smaller firms grew faster in their sales. Thus, M&A had no relationship to the change in sales growth pattern.

Table 4 shows the firm growth pattern in relation to MES and M&A. When M&A was combined with MES, firm growth pattern is complicated. In Table 3, the parameter β was greater than one below MES. This pattern is the same only for firms without M&A. Below MES small firms with M&A are expected to grow faster than larger competitors. It means that M&A is an efficient strategy to reach the minimum efficient scale for small firms.

Especially the sales growth rate is dramatically increasing, which the parameter β is 0.62. Similar with the pattern of below MES, above MES the growth pattern of firms without M&A is the same as shown in Table 3. Above MES the parameter β is greater than one for firms with M&A. Therefore, M&A contributes to enjoy the benefit of scale economies for huge restaurant firms above MES. The results show the evidence that M&A is an efficient strategy to reach the minimum efficient scale and enjoy the benefit for firms below MES. Moreover, large firms above MES can continue to take advantage of scale economies by M&A.

Table 4
Empirical Result of Size, M&A Effect at time t and $t-1$ for Eq. $z_{t,i}=(\beta+\rho)z_{t-1,i}+(-\beta\rho)z_{t-2,i}+v_{t,i}$

Var.	^b MES	M&A	Param.	time t			time $t-1$		
				Estimate (SE)	χ^2	Adj. R ²	Estimate (SE)	χ^2	Adj. R ²
Assets	Below	No	β	1.01954 (0.0094)	66.13**	0.9615	1.02285 (0.0099)	94.59**	0.9612
			ρ	0.169516 (0.0362)			0.21208 (0.0362)		
		Yes	β	0.935099 (0.0629)	4.03	0.8511	0.933635 (0.0478)	5.06	0.8990
			ρ	0.136696 (0.1521)			-0.00572 (0.1361)		
	Above	No	β	0.995964 (0.0085)	188.15**	0.9816	0.966954 (0.0094)	160.68**	0.9796
			ρ	0.427749 (0.0694)			0.449963 (0.0738)		
		Yes	β	1.016468 (0.0117)	11.35**	0.9631	0.993709 (0.0102)	1.66	0.9831
			ρ	-0.34877 (0.4132)			-0.08847 (0.2506)		
Sales	Below	No	β	1.029869 (0.0136)	66.55**	0.9276	1.02551 (0.0140)	65.67**	0.9270
			ρ	0.239931 (0.0499)			0.253664 (0.0511)		
		Yes	β	0.619416 (1.5999)	37.39**	0.9030	0.879495 (0.0820)	15.15**	0.8998
			ρ	0.581125 (1.7146)			0.333721 (0.1709)		
	Above	No	β	0.956677 (0.0085)	461.05**	0.9858	0.964257 (0.0085)	435.02**	0.9854
			ρ	0.546821 (0.0504)			0.547335 (0.0503)		
		Yes	β	1.034243 (0.0206)	10.73**	0.9796	1.00022 (0.0146)	1.13	0.9739
			ρ	0.265713 (0.1509)			0.144999 (0.1977)		

*p<0.05, **p<0.01

However, this benefit of M&A is questionable for assets growing pattern and even for post M&A growing. 1-year post M&A growth rate of total assets is random walk for both below and above MES, which Gibrat's Law holds. Nevertheless, the pattern is little different for net sales. Only 1-year post M&A growth of firms above MES is independent of the firm size. This means that for firms above MES, M&A cannot ensure post M&A growth. The reason may be that firms may be less efficient after M&A due to their mammoth size itself or often because of difficulties in melting two corporate cultures. Theoretically, in order to take advantage of scale economies at a point of above MES, long-run average cost must fall and be sustained at the lowest level. However, firms' long-run average costs may be increased due to the less inefficiency by M&A.

CONCLUSIONS AND FUTURE RESEARCH

This study tested Gibrat's Law for the U.S. publicly traded restaurant firms. In spite of the importance of the relationship between firm size and growth rate, the hospitality research literature has not dealt with the relationship between them. In perspectives of persistent growth, Gibrat's Law is rejected in the restaurant industry. Consistent with Evans (1987) and Dunne & Huges (1994), small firms grow faster than large firms in the restaurant industry as well. Such growth patterns in the restaurant industry are changed by MES, but Gibrat's Law is still rejected for firms that are below and above MES. Below MES, larger firms grow faster than smaller firms. Above MES, however, smaller restaurant firms grow faster than their larger counterparts. This means that very small and micro restaurant firms are difficult to grow fast. Hence, the larger firms are, the more firms take advantage of benefits from scale economies until they reach the MES. However, above MES, larger restaurant firms cannot realize benefits of scale economies, and, adversely, smaller firms show faster growth than their larger competitors. One possible reason is that the persistent growth of huge restaurant firms can not be attained by only the benefit of long-run average cost or scale economies. And the inefficiency might be caused by the huge firm size, which debases the impetus to accommodate themselves under capricious business surroundings.

M&A is often used as an efficient strategy to grow up to the point where a firm can take advantage of benefits from economy scale. Further, through increasing firm size and eliminating competitors by M&A, firms would like to strengthen market power. This study included M&A as a major effect on the relationship between firm size and firm growth due to the extraordinary impact of M&A on firm size. Interestingly, Gibrat's Law holds in firms executing M&A only for the variable of total assets as shown in Table 3, but not for net sales. This means that the influence of M&A on the relationship between firm size and firm growth has a physical impact on firm size as a shock.

Nevertheless, the result of non-linear regression shows that M&A change the growth pattern in both below and above MES. Interestingly, in both the corresponding and post year, firms with M&A below the minimum efficient scale shows that the parameter β of net sales is less than one and Gibrat's Law is rejected. Therefore, in terms of net sales M&A is an efficient growth strategy for firms below MES, but not for total assets growth. In the corresponding year executing M&A, firms below MES showed that Gibrat's Law holds for variable of total assets. But, in the post M&A growth, only variable of net sales for firms below MES shows that Gibrat's Law is rejected. Therefore, in light of post growth M&A, M&A could not guarantee the growth for large firms. Therefore, the post growth M&A follows random walk and independent of the firm size. The reason may be the extraordinary increasing of large firms accrues inefficiency and plays a role of growing resistance due to increasing long-run average cost. However, M&A is still an effective growth strategy for small firms. Therefore, M&A is a leading strategy to reach the point of MES in order to take advantage of benefits from economy of scale.

The industrial implications of this study are as follows; first, decision making regarding M&A should be careful. Below minimum efficient scale M&A is a good growth strategy for relatively small firms in terms of sales growth. However, larger firms below MES are expected to grow slowly if they execute M&A. On the other hand, above MES firms can not take advantage of the benefits after M&A, because the post growth of M&A is a random walk. Second, this study delineated the restaurant firms' growth pattern changed by minimum efficient scale, which is very helpful to investors. In particular, investors can forecast the restaurant firm's growth based on firm size and M&A.

Academically, this study attempts to verify the relationship between firm size and firm growth according to the MES and M&A using Gibrat's Law. Depicting the growth pattern of restaurant firms and opening a window to uncover the effect of MES and M&A is a new attempt in hospitality academia. Still, there are some questions unanswered. This study used a sample of U.S. publicly traded restaurant firms. As Audretsch et al. (2004) said, depending on the composition of firm size in an industry or nation, the result of testing Gibrat's Law can be different. In Audretsch et al. (2004), they concluded that Gibrat's Law holds for the Dutch hospitality industry because family-owned and small individual firms are the major business type in Dutch hospitality industry. This means that the Dutch hospitality industry is composed of very small firms compared with the sample used in this study. Accordingly, there can be different results for small, private U.S. restaurant firms.

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SOCIAL IMAGE CONGRUENCE AND TOURISTS' VISITING INTENTION TO CONSPICUOUS DESTINATION

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ABSTRACT

This empirical study reports the effects on tourist visiting intention of social image congruence and values that tourists have for conspicuous destinations. To find stimuli for testing the proposed model, three conspicuous and three inconspicuous U.S. destinations were first identified. The main findings of structural equation modeling analysis indicated that tourist social (public) image congruence strongly and positively affected both visiting intention and values tourists hold for conspicuous destinations. However, the study finds a significant relationship between visiting intention and only one dimension of values for conspicuous destination. This study offers explanations and directions for future study based on results.

Key Words: social (public) image congruence, values, meanings, conspicuous destination, visiting intention

INTRODUCTION

People purchase, use, own, and display certain goods and services to enhance their sense of self, to present an image of what they are like, to represent what they feel and think, and to bring about the types of social relationships they wish to have (Braun & Wicklund, 1989; Eastman et al., 1999; Ewen, 1988). This consumption tendency has been studied under terminologies in sociology, economy, and consumer psychology and behavior such as “conspicuous”, “status”, “brand”, “symbolic”, and “luxury consumption” (Veblen, 1899; Mason, 1981; Dittmar, 1992; Eastman et al., 1999). Thorstein Veblen was an economist who first introduced the concept of conspicuous consumption (CC) in his *Theory of the Leisure Class* (1899). CC is defined as “consumption of a product to demonstrate the superior status of the individual using the product to his/her friends” (Packard, 1959).

A tourist's choice of travel destination would make an ideal for a study of CC because of the discretionary nature of the travel destination choice. The concept can explain a tourist's desire to show off his/her economic success and status to impress others when taking a trip to luxury or prestige destinations (e.g., Milan, Paris). This phenomenon, however, may be more meaningful to some tourists than to others in making destination choices. Those who place great value on improving social standing and demonstrating social status through acquisition and consumption of products or service will be more likely to visit destinations that are more prestigious, noticeable, and conspicuous. Those involved in tourism and tourism research need to understand how visiting a conspicuous destination can satisfy tourists' needs to give a favorable impression and to manage their identities by receiving preferential treatment in the process. Sirgy's self-congruence theory (1997) describes consumer behavior through self-concept motives such as the need for social approval and social consistency. This view illustrates consumer preference for products with a strong positive image that matches their self image or the image that other people have of them, and as well as helping explain why consumers consider the opinions and approval of others important. By demonstrating the economic ability to visit to a luxury resort (conspicuous destination), one can present a prestigious social self image to others and enhance one's position in society.

Based on this groundwork, a tourist's social image congruency (matching a person's image with a destination image as perceived by others), the value that an individual places on conspicuous destination, and the

intention to visit such a destination should have a strong relationship. This demonstrates a need to understand the relationship between tourists' social self image and the concept of CC and how this relationship leads to a tourist's decision to visit conspicuous destinations. The concept of CC itself has not been investigated in the study of tourists' behavior intention. This study will help tourism researchers and destination marketers better understand and segment today's very self-expressive and identity-conscious tourist market better, and thus develop and position products to better fulfill tourists' psychological needs.

Previous consumer researchers identified conspicuous and inconspicuous consumer products (Goldsmith et al., 1999; Wong & Zhou, 2005). From their findings, it may be possible to assume that one tourist destination is more conspicuous than another. Before exploring the relationship among the constructs, however, we first must address the question of how one tourist destination is more conspicuous than another. Thus, the objectives of this study are (1) to identify examples of conspicuous and inconspicuous tourist destinations within in the United States, and (2) to investigate causal effects among social (public) self image congruence (IC), values associated with visiting conspicuous destinations, and tourists' visiting intention (VI) towards conspicuous destinations.

THEORETICAL FOUNDATION AND HYPOTHESES

Relationship between IC and VI

Self-concept generally refers to the totality of the individual's thoughts and feelings, having reference to himself/herself as an object (Rosenberg, 1979). Many studies have explored product choice in terms of the congruency of the product to an individual's self-concept (Chon & Olsen, 1991; Sirgy, 1982; 1985). This is referred to as self image-congruence (IC). Generally, consumers prefer, or intend to buy or use, brands, products, and stores that are more congruent with their own self-concepts (Hong & Zinkhan, 1995). There are four types of self image congruence: actual, ideal, social and ideal social self image congruence (Sirgy and Su, 2000). The actual and ideal self-congruence are included in the private self (how tourists see themselves). The social and the ideal social self-congruence are part of the public self (how tourists are seen by others). The public (social) IC is more germane than the private (self) IC when studying CC because CC is about demonstrating an individual's wealth publicly, communicating affluence to others, and being recognized by significant others. The focus is more on what is perceived through the eyes of others than through one's own. Thus, the public IC will influence the tourists' visit intention to visit conspicuous destinations.

Conspicuous consumption (CC) refers to the practice of using products to signal social status aspirations to other consumers (Mason, 1981; Braun & Wicklund, 1989). Generally, CC is pursued in order to enhance one's prestige in society, which can be achieved by publicly signaling wealth and communicating affluence to others (O'Cass & McEwen, 2004). Product conspicuousness refers to the extent to which a product is consumed in public, not in private. Bourne (1957) discussed one of the conspicuousness forms, visibility. This relates to products that are being used either publicly (where consumption can be witnessed) or privately (where it cannot be seen). According to Piron (2000), for consumption to be conspicuous, it has to be a social event, publicly witnessed by other consumers. Therefore, publicly used products are more conspicuously consumed/used than products that are privately consumed/used. For example, visitors to a popular upscale resort might be more conscious about expressing themselves by communicating about their vacation with their family, friends, and colleagues than visitors to a lesser-known tourist destination. In this context, Sirgy and Su (2000) stated that the public self (social and ideal social) should better predict preferences for conspicuous products than inconspicuous products. This proposition appears to be logical when the private self focuses on one's freedom to express one's inner values and tastes without concern for other people. The public (social) self is more concerned with public display (Back, 2005).

Relationship between IC and Value/Meaning of CC

The self-congruence theory also describes the mediating effects of self-concept motives (self-esteem and self-consistency/ social consistency and social approval) in the relationship between image congruence and consumer behavior (Sirgy, 1982). The mediating effect explains the notion that every self-image has a value association that determines the degree of positive or negative affect felt when a particular self-image is activated (Wang, 1990). The present study only deals with the public (social) self, thus only social consistency and social approval motives are relevant to this discussion. In general, the social self IC influences behavior through the social consistency motive (Sirgy et al., 1992). Individuals are motivated to maintain an image that others have of them. Violating that image would make an individual very uncomfortable (Back, 2005) because of the need to maintain

social consistency, such as the way tourists' reference groups influence tourist destination choices (Mansfeld, 1992; Pearce, 1982). Tourists tend to conform to the norms of their reference groups.

On other hand, the ideal social self IC affects individual behavior through the social approval motive (Sirgy et al., 1992). People are motivated to behave in the way that would cause others to think highly of them. When an individual behaves in a way that is consistent with his/her ideal social image, he/she will earn approval from others (Sirgy & Su, 2000). By taking a trip to a trendy place, a person would receive honor and social recognition from others (Riley, 1995). Wang (1990) found that social consistency and social approval mediate the effects of social and ideal social congruence on the loyalty of restaurant patrons.

The meanings and/or values that tourists place on conspicuous destinations can explain the associated values of social consistency and social approval in more detail. Four meaning and value dimensions of CC (*interpersonal mediation, materialistic hedonism, communication of belonging, status demonstration*), which were developed by Marcoux et al. (1997), can further illustrate this concept. Four dimensions of their study explains as follow, interpersonal mediation corresponds to the influence of social relations; materialistic hedonism brings pleasant aspects of consumption; communication of belonging concerns the association in a positive or negative way to demographic, socio-economic, ethnic, or cultural stereotypes or/and groups; and social status demonstration concerns signaling one's success, wealth, and prestige (Marcoux et al., 1997). Just as tourists are more likely to visit places where they can maintain social consistency and earn approval from others, tourists concerned about their social image are more likely to visit destinations that can induce respect, value, and popularity from others (*interpersonal mediation*); destinations that can make tourists feel unique and trendy (*materialistic hedonism*); destinations which make tourists feel sense of belonging to their social group because others have visited the same destinations (*communication of belonging*); and destinations that symbolize success, prestige and, wealth to tourists (*status demonstration*).

The mediating effect of value/meaning of conspicuous destination on the relationship between social IC and visiting intention (VI) means that a tourist who perceives that a destination image matches highly with his/her social image will place higher value and meaning on traveling to that conspicuous destination and will more likely to make the effort to visit the destination. Social IC directly affects each value/meaning view, so when a tourist perceives that the image of a prestige tourist destination matches his/her own high-status social image that tourist will see more value in visiting that particular destination. Interpersonal mediation means that such a destination highly matches the social image that others have of the tourist, so he or she would try to improve the social relations he or she has by visiting that destination. The tourist would also more likely seek pleasant feelings from the visit (materialistic hedonism), to conform to the society to which he or she belongs (communication of belonging), and to demonstrate his or her social status (status demonstration).

Relationship between Value/Meaning of CC and Behavior Intention

Goldsmith et al., (1996) stated that "one important motivating force that influences a wide range of consumer behavior is the desire to gain status or social prestige from the acquisition and consumption of goods." This notion is consistent with Eastman et al. (1999) who asserted that "the more a consumer seeks status, the more he/she will engage in behaviors." The values and meanings that consumers place on gaining status or social prestige through acquisition and consumption of goods influence the consumption decisions of modern consumers (Goldsmith et al., 1996). The higher values and meanings that consumers set on CC, the more concerned the consumers will be about enhancing their status and image, demonstrating their wealth, confirming social relations, finally feeling good about themselves through such consumption. Thus, these motives influence consumer preferences for more conspicuous products and services. Marcoux et al. (1997)'s four dimensions of values/ meanings of CC significantly influenced the Polish consumers' preferences for western products. Wang and Chen (2004) also noted that Chinese consumers with higher values on CC have stronger intentions to buy imported products that are perceived as status symbols (Batra et al., 2000; Mason, 1981). Based on the above discussion, this study proposes following hypotheses.

H1: Public self image congruence(IC) has significant influence on tourist visiting intention (VI) toward conspicuous tourist destinations.

H2: Tourist social self image congruence (IC) has significant influence on interpersonal mediation (IM) of CC.

H3: Tourist social self image congruence (IC) has significant influence on materialistic hedonism (MH) of CC.

H4: Tourist social self image congruence (IC) has significant influence on communication of belonging to a group (BE) of CC.

H5: Tourist social self image congruence (IC) has significant influence on social status demonstration (SD) of CC

H6: Interpersonal mediation (IM) of CC has significant influence on tourists' visiting intention (VI) toward conspicuous tourism destination.

H7: Materialistic hedonism (MH) of CC has significant influence on tourists' visiting intention (VI) toward conspicuous tourism destination.

H8: Social status demonstration (SD) of CC has significant influence on tourists' visiting intention (VI) toward conspicuous tourism destination.

H9: Communication of belonging to a group (BE) of CC has significant influence on tourists' visiting intention (VI) toward conspicuous tourism destination.

METHODOLOGY

Research Design

This study comprised two parts. The first part of the study identified leisure travel destinations that are conspicuous and inconspicuous within the United States. In part I, two separate survey groups were formed with 50 participants in each group. Participants were recruited randomly among students, both undergraduate and graduate, faculty, and administrative staff from the business and hospitality management departments at a major Midwestern university. For the first group, participants were asked to provide three conspicuous and three inconspicuous leisure destinations within the United States that best fit the adjectives that were provided for each type of destination. Four synonyms were provided for the conspicuous destination: *prestigious*, *noticeable*, *ostentatious*, and *pretentious*, with another four synonyms for the inconspicuous destination: *unremarkable*, *ordinary*, *low key* and *obscure*. These adjectives were extracted by searching synonyms for each term from Webster online dictionary (Merriam-Webster Online) and by consulting a professor from the English department at the same university. The six highest ranked destinations from each category were extracted and used for the second survey group.

The second survey group validated the results from the first group. Another set of 50 participants was recruited for the second group. The same two sets of four synonyms for each destination category were provided again and the six conspicuous and six inconspicuous destinations extracted from the first group were also listed randomly. Respondents were asked to choose either conspicuous or inconspicuous for each destination, whichever they thought best matched the 12 destinations listed. Results from the second group were compared with destinations from the first group by matching how destinations were perceived, either conspicuous or inconspicuous. From these two groups, three conspicuous destinations were identified as New York City, NY; Los Angeles, CA; and Las Vegas, NV, while three inconspicuous destinations were identified as Boise, ID; Branson, MO; and Fargo, ND. The three identified conspicuous destinations were used as stimuli for the next part of this study.

Instrument Development

To measure image congruence, subjective image-congruence measurement scales on social and ideal social congruence were adapted from Sirgy et al. (1997). To measure the values/meanings of CC of tourism destination, The 17 measurement items from Marcoux et al. (1997), 7-point Likert type (1= strongly disagree and 7= strongly agree) scale for values/meanings of CC (e.g., "Traveling to destination x increases my value in the view of others.") were included in the main questionnaire. After initial principal component factor analysis, 12 items-four factors were included in the main analysis. Three items were adapted from Ajzen's work (2002) to measure tourist visiting intention (VI) to the three conspicuous destinations. Respondent demographic information also was collected. A pilot test was conducted on 40 undergraduate and graduate students in the hospitality program. Based on the pilot study and reliability test (Cronbach's alpha cutoff of .70), minor revisions, mostly in wording, were made to the survey.

Sample and Data Collection

Self-administrated questionnaires are distributed via the university's online survey system to 1,860 faculty and administrative staff using their electronic mail addresses. The survey system was set up so that it sent out the survey three times, once every five days. A total of 323 responses were returned. After carefully examining the data, 52 responses were unusable due to incomplete data. Thus, 271 were coded for data analysis, resulting in a usable response rate of 15%.

DATA ANALYSIS AND RESULTS

Sample Characteristics

The 271 respondents were almost evenly divided between male and female. Half of them were between ages 41 and 60 (54.8%). Not surprising in the Midwest, about 84% of respondents were Caucasians. Approximately, 86% had at least a 4-year college level education and 72% were married. Annual household income was almost evenly distributed among income brackets from \$30,001 and \$150,000 except for the income between \$75,001 and \$90,000 (14%).

Measurement Model

This study used the Anderson and Gerbing (1988) two-step approach to analyze the proposed model. At the beginning of the survey, respondents were asked to choose one of the three cities with which they were most familiar and to fill out the survey based on their choice of city. A 17-item, six factor covariance structure measurement model was estimated to assess the model fit, reliability, and construct validity. Internal consistency was tested using a reliability test. Table 1 shows that the coefficient alpha estimates for the multi-item scales all exceeded the cutoff value of .70 (Hair et al., 1998), ranging from .73 to .94. For construct validity, all factor loadings for each latent construct were significant at .01, thus confirming convergent validity. Furthermore, all average variance extracted (AVE) were greater than the recommended value of .50, ranging from .60 to .88, indicating adequate internal consistency. Comparing the AVE with the squared correlations between constructs was the most rigorous way to test discriminant validity (Fornell & Larcker, 1981). As shown in Table 1, the model supported good discriminant validity; all squared correlations between each pair of constructs were less than the AVE. Confirmatory factor analysis using Amos 4.0 (Arbuckle, 1999) was used to evaluate the measurement model to refine the manifest variables for each of six latent variables. The measurement model was estimated from the covariance matrix and was considered for any modification based on suggested modification indices. The Chi-square fit of the measurement model was significant ($\chi^2 = 216.43$; $df = 104$; $p < .001$). The Chi-square fit is widely known for its sensitivity to sample size (Bagozzi & Yi, 1988). However, other fit statistics (Comparative Fit Index [CFI] = .97; Normed- Fit Index [NFI] = .94; and Root Mean Squared Error of Approximation [RMSEA] = .06) demonstrated the measurement model fits the data reasonably well (Hair et al., 1998). In sum, the measurement model was strongly supported.

Table 1
Measurement Model Fit

Measurement Model Correlation Matrix (Squared)							
	IM	MH	SD	BE	IC	VI	AVE
IM	1						0.70
MH	0.48 (.23)	1					0.60
SD	0.62 (.38)	0.52 (.27)	1				0.74
BE	0.56 (.31)	0.35 (.12)	0.43 (.18)	1			0.70
IC	0.49 (.24)	0.48 (.23)	0.26 (.07)	0.34 (.12)	1		0.88
VI	0.36 (.13)	0.36 (.13)	0.21 (.04)	0.32 (.10)	0.56 (.31)	1	0.68
Mean	2.89	4.88	3.99	3.61	3.42	3.32	
S.D.	1.37	1.20	1.58	1.58	1.51	1.60	
Composite α	0.92	0.73	0.90	0.82	0.94	0.87	

Note: IM = interpersonal mediation; MH = materialistic hedonism; SD = social status demonstration; BE = communication of belonging. All correlation coefficient were significant at the .01 level.

Structural Model and Hypotheses Testing

A structural model was estimated to assess the paths and to explain variance estimates. The initial models produced significant χ^2 statistics ($\chi^2 = 432.70$; $df = 110$; $p < .001$). Modifications were made based on suggested modification indices provided by the program. Measurement items were allowed to covary within constructs in sequence. While the χ^2 statistics were still significant and, indeed, improved ($\chi^2 = 275.93$; $df = 107$; $p < .001$), other goodness-of-fit statistics were improved reasonably (CFI = .90 \rightarrow .95; NFI = .87 \rightarrow .92; RMSEA = .10 \rightarrow .07). The final goodness-of-fit statistics of the structural model in Table 3 showed that the model was parsimonious and reasonably fits the data. The maximum likelihood estimation was used for the parameter estimation. Table 2 presents path coefficients and t values for the proposed model. The t values indicate statistical significance of the parameter estimates (Fornell & Larcker, 1981) and were used for hypothesis testing. The t values of all regression

weights between public (social) IC and VI ($\beta_{IC\ VI} = .52, t = 4.90$) and paths between public (social) IC and all four dimensions of meanings of CC ($\beta_{IC\ IM} = .56, t = 9.38$; $\beta_{IC\ MH} = .64, t = 6.94$; $\beta_{IC\ SD} = .33, t = 5.08$; $\beta_{IC\ BE} = .40, t = 5.82$) were all significant, demonstrating strong positive relationships. Therefore, hypotheses 1 through 5 were all supported. The public (social) IC accounted for 32% of variances in IM, 41% of MH, 11% of SD, and 16% of BE. The materialistic hedonism (MH) was most strongly explained by the public (social) IC. On other hand, three dimensions of values/meanings of CC, interpersonal mediation ($\beta_{IM\ VI} = .00, t = -.30$), materialistic hedonism ($\beta_{MH\ VI} = .03, t = .29$), and status demonstration ($\beta_{SD\ VI} = -.01, t = -.16$) had no positive direct effect on VI. Thus, hypothesis 6, 7, and 8 were not supported. Only communication of belonging had a positive effect on VI ($\beta_{BE\ VI} = .16, t = 1.99$) at the .05 level, supporting Hypothesis 9. The model explained 38% of variance in visiting intention. Most dimensions of values/meanings had no direct effect on VI and only weak support of Hypothesis 9, so no further analysis was performed to check the mediating effect of values/meanings of conspicuous destination.

Table 2
Standardized Parameter Estimates (N = 271)

Hypothesized Paths	std. coefficient	t	R ²
Public image congruence --> visiting intention (H1)	0.52	4.90**	
Public image congruence --> interpersonal mediation (H2)	0.56	9.38**	
Public image congruence --> materialistic hedonism (H3)	0.64	6.94**	
Public image congruence --> social status demonstration (H4)	0.33	5.08**	
Public image congruence --> communication of belonging (H5)	0.40	5.82**	
Interpersonal mediation --> visiting intention (H6)	0.00	-0.30	
Materialistic hedonism --> visiting intention (H7)	0.03	0.29	
Social status demonstration --> visiting intention (H8)	-0.01	-0.16	
Communication of belonging --> visiting intention (H9)	0.16	1.99*	
Interpersonal mediation			0.32
Materialistic hedonism			0.41
Social status demonstration			0.11
Communication of belonging			0.16
Visiting intention			0.38

Note: Goodness-of-fit indices: $\chi^2 (107) = 275.93, p < .001$; Root Mean Squared Approximation (RMSEA) = .07; Non-normed Fit Index (NFI) = .92; Comparative Fit Index (CFI) = .95. * $p < .05$, ** $p < .001$

DISCUSSION AND IMPLICATIONS

This research adapts the relatively new construct of conspicuous consumption in tourism to investigate whether tourism destinations could be categorized as conspicuous or inconspicuous. Midwesterners identified three conspicuous destinations (New York City, Los Angeles, and Las Vegas) and three inconspicuous destinations (Boise, ID; Branson, MO; Fargo, ND) in the steps prior to the main study. This finding indicates some evidence that tourists perceive tourism destinations as conspicuousness at different levels and that a tourism destination can be either conspicuous or inconspicuous. As Sirgy and Su (2000) stated, there is a higher chance that tourists can be observed and/or noticed by others when they visit conspicuous destinations like New York City, Los Angeles, or Las Vegas than when they visit Boise, Branson, or Fargo. This finding is important for destination marketing organizations that need to know how their destinations are perceived by potential visitors. They can target their market better and develop more appropriate tourism products according to the level of perceived destination conspicuousness.

This study also sought to explain the values/meanings of tourist choices of conspicuous destination in relation to public (social) image congruence and tourists' actual visiting intention. The structural model analysis shows several significant causal relationships among the six constructs. The public (social) IC positively affects tourist VI to conspicuous destinations, supporting Sirgy and Su's (2000) IC theory. Tourist perceptive matching processes between their social and ideal social concept and destination image can explain their VI towards conspicuous destinations. This means that if the more tourists perceive their social image more similar to the conspicuous destination image, they will more likely visit the conspicuous destinations.

The result shows that the public (social) IC also has a significant positive effect on the four dimensions of values/meanings of CC, IM, MH, SD, and BE. This indicates that a tourist who perceives that a destination image closely matches his/her social image will rely heavily on each of these different values/meanings in traveling to a

conspicuous destination. For example, a tourist who believes that the image of New York City (a conspicuous destination) matches his/her social image well would think that traveling to the city means an opportunity to demonstrate his/her social status, success, prestige, and wealth (SD). The tourist who wants to travel to the destination simply because most of his/her acquaintances have traveled to that destination will try to conform to the group norm (BE). Gaining pleasure from traveling to the destination also must be highly regarded (MH). Lastly, tourists must value highly receiving favorable treatment and respect from others (IM); the perceived image congruence between the self concept and destination image is high.

Only the BE was significant for VI, demonstrating that a tourist only has high intention to visit a conspicuous destination when he/she values traveling to the destination because most of his/her acquaintances have already visited. The rest of the three proposed paths between CC values/meanings and VI were not significant. This result contradicts the literature (Goldsmith et al., 1996; Marcoux et al., 1997). Thus, of the four dimensions of value/meaning, the BE value/meaning is more relevant in discussing tourist VI. It is more meaningful to tourists to gain respect from others and gain a sense of belonging to their own social groups through visiting a conspicuous destination. They are more likely visit a destination because people they have visited the destination.

Although not all proposed paths were significant, the test results are useful for destination marketing segmentation and for positioning tourist products and services. Destination marketers should categorize visitors based on their motives for visiting conspicuous versus inconspicuous destinations, which may reveal other demographic or psychographic characteristics that might better represent the tourists. In addition, these different tourist profiles might differentiate tourist segments to which various tourist products appeal or for which advertising strategies could be implemented. Destination managers also should identify the specific visiting motives that are strong for conspicuous versus inconspicuous destinations, so they can change the advertising message or emphasize the benefits of visiting their destination. The results also broaden our understanding of CC in the context of tourism in relation to public (social) IC. While widely used with mostly consumer products, CC can be also utilized in analyzing tourist products especially in tourist's destinations. Even when choosing a vacation spot, it is important for today's tourists to pick a destination where they can enhance their sense of self and present an image of what they are like to others. Today's tourists are more conscious about expressing themselves and about defining their identity. Selection of a highly regarded destination could help consumers to fulfill their needs. The concept is relatively new in tourism and needs to be refined through a closer examination of the concepts and through the conduct of a more formalized empirical study.

Despite the careful design of the study, this study does have several limitations. First, the sample might be limited. Although the university faculty and administrators might represent midwesterners well, they also represent the 'educator' segment of tourists. They might not want to publicly signal wealth and communicate affluence to others because of their perceived conservative image as educators. Thus, the generalizability of the study results is also a limitation. In relation to this issue, this study did not take into consideration of respondents' demographics in categorizing destinations as conspicuous or inconspicuous. Categorizing destinations as conspicuous or inconspicuous would depend on many factors such as the culture, country of origin, regions of residence, past visit experience to the destination, age, gender, income level, and other consumer social-demographics.

Another suggestion for future research would be to use the multi-group invariance test for measurement and structural models for the two destination categories. The multi-group analysis would help show any difference in the measuring instrument and conceptual construct between two destination categories. This analysis would make clear how the construct of meanings and values placed on conspicuous and inconspicuous destinations work differently. Any noninvariant results in measuring constructs represent significant differences (Byrne, 2000) between conspicuous and inconspicuous destinations. In summary, more research is necessary on this valuable construct 'conspicuousness' to fully use it in tourism.

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FACTORS INFLUENCING HOTEL OUTSOURCING DECISIONS: A STUDY OF THE INDUSTRY IN THAILAND

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ABSTRACT

The paper examines the effects of variables on the outsourcing decisions in the hotel industry. It provides and tests a robust theoretical framework by combining the Transaction Cost Economics (TCE) factors with additional factors affecting the level of outsourcing that emerged from a preliminary study. Drawing on a sample of 811 outsourcing decisions, the results provide some support for TCE and more support to production cost. The effects of TCE on outsourcing decisions are marginally overshadowed by production costs.

Key Words: outsourcing, transaction cost economics, hotel, Thailand

INTRODUCTION

Outsourcing has become a popular management practice in today's competitive environment (Rollins-Hinkle, 2001). The academic literature on the subject has mirrored the growth of this business practice (Lonsdale and Cox, 2000), with a focus on manufacturing firms. However, outsourcing has assumed an increasingly important role in the hotel industry, involving a wide range of activities such as laundry, cleaning, spas, security and food and beverage outlets (Espino-Rodriguez and Padron-Robaina, 2004). Secondly, there has been only limited previous research into hotel outsourcing and research undertaken has been geographically restricted to the Canary Islands (see Espino-Rodriguez and Padron-Robaina, 2004; 2005a; 2005b; Espino-Rodriguez and Gil-Padilla, 2005a; 2005b) and Australia (see Lamminmaki 2005 and 2007). This paper adds to this research by developing a new model of outsourcing and investigating this in a different geographical area.

The concept of Transaction Cost Economics (TCE) was chosen as the theoretical framework for researching hotel outsourcing behavior. First, it specifically addresses sourcing decisions and is claimed, by various scholars such as Gronhaug and Haugland (2005), to describe this phenomenon better than other theories. Second, TCE it is a well established theory and widely used by researchers to interpret organizational reality (Lacity and Willcocks, 1995).

The term 'outsourcing' has been defined in various ways by scholars (such as Lankford and Parsa, 1999; Domberger, 1998; Espino-Rodriguez and Padron-Robaina, 2006), therefore in this paper, the term is used to refer to an externalization (to independent suppliers) of internal activities that could be and/or have previously been carried out in-house. Furthermore, the production responsibility of the activity given to the outside expert can be either partial or whole.

The paper aims to examine the effects of variables on the outsourcing decisions in the hotel industry. It specifically seeks to provide and test a robust theoretical framework by combining the TCE factors with additional factors affecting the level of outsourcing that emerged from a preliminary study.

LITERATURE REVIEW

Coase (1937) questioned whether it is sufficient to assume that resources and products are allocated in the economy by price alone. He discovered that there were costs of using the price mechanism in the market which the neoclassical paradigm of price had ignored. As a result, many organizations choose to produce goods and services (inputs) internally rather than obtaining them from the market. These costs include the costs of searching for prices, negotiating, and concluding a separate contract for each transaction. Based on this argument, Williamson (1975; 1979; 1981) proposed TCE theory which positions the firm as a governance structure. The firm's objective is to efficiently manage its various transactions by correctly matching different sourcing alternatives to achieve the economic optimum of both production expenses and transaction costs. Due to economies of scales and specialization provided by the market, markets are a more efficient governance structure, unless a transaction is surrounded by special circumstances. TCE proposes three circumstances under which markets will not be used (i.e. outsourcing will not occur). First, for transactions that are high in asset specificity. Second, when these highly specific transactions are high in uncertainty and/or frequency. And third, in less competitive supplier markets.

Asset specificity refers to the degree to which transactions are supported by durable and transaction-specific investments (Williamson, 1975). This denotes the extent of customization or specialization of the asset required for a particular transaction or user. High asset specificity indicates that the asset must be specially designed for the use of just one particular transaction or user. This asset cannot be used for other buyers without huge adaptation. In general, transactions with high asset specificity favor in-house production (Rindfleisch and Heide, 1997; Vining and Globerman, 1999; Williamson, 1981).

The second factor, **uncertainty**, entails the inability of decision makers to specify a complete contract (Williamson, 1975). It refers to the level of unforeseen changes in conditions surrounding a transaction (Grover and Malhotra, 2003) and thus indicates a lack of information (Aubert et al., 1996b). This dimension positions TCE away from the traditional unrealistic assumption of classical economic theory where all economic agents are well-informed. Indeed, most transactions carry some degree of uncertainty. It is generally perceived as being difficult and costly to measure the actual performance of suppliers, particularly in the case of services (Aubert et al., 1996a). Since bounded rational individuals have capability limitations in processing information, the situation will turn more severe in a high uncertain environment. This raises problems in predicting future contingencies as the company has limited information and thus undermines the company's ability to specify accurate elements in the contract (Bello et al., 1997). In summary, where transaction specific investments are present, uncertainty raises transaction costs.

The **frequency** with which transactions occur refers to the repetitiveness and volume of similar transactions (Lamminmaki, 2007). For the purpose of this paper, only reoccurring activities are examined and thus frequency refers to the job volume required in the hotel throughout the year. Where specific assets are not required and suppliers are competitive, transactions, irrespective of the frequency level, are commonly organized through the market because it provides more production efficiency. Companies are willing to bear the relatively lower transaction costs embedded in the market as they are outweighed by the external expert's production cost advantages. On the contrary, given the specific investments required and thus high transaction costs, recurrence permits costs to be recovered through insourcing (Williamson, 1979). Therefore, frequency alongside specific investments should favor internal production.

Another factor, **market competition** of suppliers, was introduced to TCE research by Walker and Weber (1984), and alternatively termed "contestability" by Vining and Globerman, (1999). It simply refers to the degree of competition of the company's current and potential suppliers in the market (Bello et al., 1997). Generally speaking, high supplier competitiveness leads to a reduction of opportunistic behaviors (Williamson, 1975) and thus a lower transaction costs. This is due to the threat to the contracts of a viable contractor replacement. Hence, suppliers are forced to price low at pre-contract stage and minimize opportunistic behaviours at post contract stage in order to outperform the competitors and sustain its business. The supplier competitiveness limits opportunistic behaviour regardless of specific investment level since it raises the supplier's post contract risk of replacement (Bello, et al., 1997). Hence, this may lead to more outsourcing.

EXPLORATORY STUDY

A few outsourcing studies in the hotel industry have adopted the TCE concept. As predicted by the theory, the asset specificity factor has been mainly used to explain hotel outsourcing. Lamminmaki (2005) found that

insourcing was generally preferred in the activities that require high specific asset investments in her initial qualitative study and later provided partial support to this variable in her further quantitative phase (2007). Likewise, leisure activities, that are highly specific to hotels, perform better when they are carried out in-house (Espino-Rodriguez and Gil-Padilla, 2005b). In addition, Lamminmaki (2007) also addressed frequency and uncertainty as key factors influencing hotel outsourcing decisions, and concluded that activities conducted frequently and, to some extent, in an uncertain environment tend not to be outsourced.

As this previous research was inconclusive, an exploratory study was undertaken to verify these established TCE variables and to identify other possible variables was conducted in hotels located in Phuket, Thailand. 22 managers were interviewed using Critical Incident Technique to elicit their opinions about the outsourcing decisions they had made. Analysis of the 64 separate incidents suggests two major influences on outsourcing – asset specificity and capital requirements. Other factors identified include environmental uncertainty, behavioral uncertainty, frequency, prior experience, guest contact and profitability – some of which have not previously been identified in hotel outsourcing research. The findings generally provide strong support for the TCE framework. Asset specificity appears to be the most dominant factor as it explains most of the sourcing decisions. The other TCE dimensions including environmental uncertainty, behavioral uncertainty, frequency and supplier competition also exert strong influences on the sourcing decisions made by the respondents. Therefore, the above hypotheses devised from TCE will be retained for further tested in this study. In addition, the findings revealed non-traditional TCE factors including capital requirement, size of work (frequency), hotel experience, profitability and guest contact that affect the respondent's outsourcing decisions.

It was found that transactions requiring high level of **capital investment** tended to be operated in-house. Many hotels perceived that high capital committed activities would render themselves to higher production costs and it would be uneconomical for smaller scale of operation when compared to external suppliers who have lower production costs in serving multiple clients.

A number of large hotels decided to operate their high volume activities in-house because economies of scale permits high production cost to be recovered through specialization of labor and bulk buying of raw material. This is particularly the case for activities that required high capital investment. In effect, the size of the hotel directly relates to the **frequency** with which production is undertaken – the larger the hotel, the more frequent the provision.

The sampled hotels that have high **experience** and knowledge in operating the investigated activity are reported to adopt insourcing decisions and vice versa in the study. As the hotel gains experience and expertise in doing a task, it learns to do it more effectively and efficiently. The cost of doing the work declines as the experience accumulates. This variable relates closely to the buyer experience concept identified by Walker and Weber (1984) and experience effect concept of Bello *et al.* (1997).

Profitability had not been identified as an outsourcing factor in previous literature. This is not surprising given that outsourcing of revenue generating transactions have been rarely investigated so far. The exploratory study found that hotels were reluctant to outsourcing anything that yielded high direct profit to the hotel eg restaurant and spa.

Many hotels reported that they tended not to outsource high **guest contact** activity because they did not want to put the hotel reputation at risks. This is consistent with Murray and Kotabe (1999)'s study as they discover that the firms would be more likely to source high specific inseparability services internally.

HYPOTHESES DEVELOPMENT

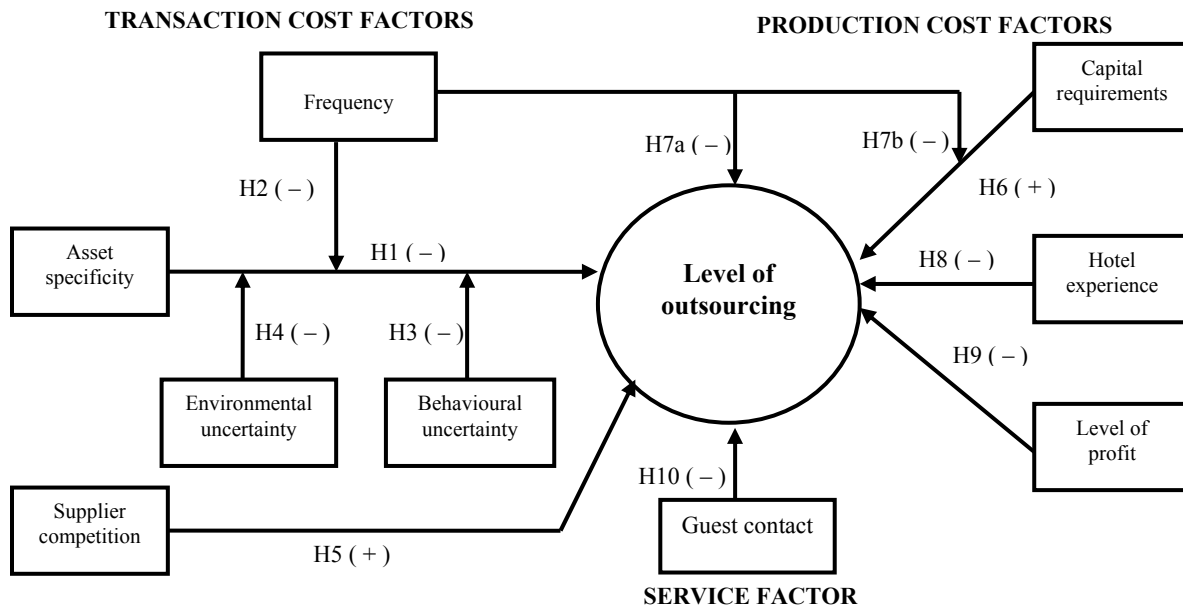
This section formulates hypotheses and the proposed relationships are summarized in Figure 1. The hypotheses are devised based on TCE and a prior preliminary study, using critical incident technique.

- H1** Asset specific investments required for a transaction decrease the level of outsourcing of that transaction.
- H2** Environment uncertainty strengthens the negative relationship between asset specificity and level of outsourcing.
- H3** Behavioural uncertainty strengthens the negative relationship between asset specificity and level of outsourcing.

- H4** Frequency strengthens the negative relationship between asset specificity and level of outsourcing.
- H5** Supplier competition increases level of outsourcing.
- H6** Capital requirement increases level of outsourcing.
- H7a** Frequency decreases level of outsourcing
- H7b** Frequency decreases the positive relationship between capital requirement and level of outsourcing.
- H8** Hotel experience decreases level of outsourcing.
- H9** Level of profit of the activity decreases level of outsourcing.
- H10** Guest contact decreases level of outsourcing.

Figure 1

Conceptual framework: proposed relationships between independent and dependent variable



METHODOLOGY

This study was a cross-sectional using a postal survey. A questionnaire was designed for self-completion by hotel managers. Section 1 requested the respondents to indicate their opinion about the factors affecting outsourcing decisions. Section 2 asked for the level of outsourcing in percentage. Section 3 required information about the hotel. The General Manager was chosen to complete the questionnaire because it was evidenced in the preliminary study that he/she made most of the key outsourcing decisions. Before the main survey, the questionnaire was pre-tested with 11 hotel managers in Phuket and the results were used to revise the questionnaire accordingly. For each hotel, six activities - restaurant, laundry (hotel's linen), guest laundry, guest transportation, security and housekeeping (guestroom) - were investigated. These activities were chosen because they offer a high degree of variation in the level of outsourcing as well as the characteristics, they are commonly offered by most hotels and outsourcing these activities has become an issue faced by practitioners in the industry. The population for this study was drawn from a comprehensive list of all hotels in Thailand's seven top tourist destinations as identified by the Tourism Authority of Thailand (TAT), as of January 2006. In total 1,092 hotels were selected for the study. Postal survey including a cover letter in Thai and English, a questionnaire in Thai and English and postage paid envelope to return complete questionnaire was carried out during May – July 2007. At the end of the survey period, 161 completed questionnaires were returned providing 14.92% of the total census. Each questionnaire provided 6 outsourcing activities hence 811 cases.

Data were screened and cleaned based on the recommendation of Tabachnick and Fidell (2007) and Hair *et al.* (2006). Data input was inspected for accuracy. Outliers were screened and the distribution of variables was examined. A number of variables exhibited skewness and outliers and thus were transformed to achieve normality and the outliers subsequently disappeared. Basic data about respondent hotels is shown in Table 1. The level of

outsourcing across all types of activities was 28.35% in average. Security was reportedly outsourced more than any other groups with an average outsourcing level of 40.84%. This was followed closely by guest transportation (38.72%) and laundry hotel linen (38.38%). In average, hotels outsourced 32.51% of their guest laundry. The average outsourcing levels of housekeeping for guestroom and restaurant, on the other hand, were much lower than the other four categories, reported at only 9.39% and 10.77% respectively.

Table 1
Respondent demographic profile

Variable	Frequency	Percent
Types of hotels		
Hotel with international chain affiliate	22	13.7
Local independent hotel	139	86.3
No of rooms		
Less than 100	77	47.8
100 – 199	49	30.4
200 or more	35	21.7
Annual average room rate (per night)		
Less than 1,000 Baht	62	43.4
1,000 – 1,999 Baht	37	25.9
2,000 Baht or more	44	30.8

A seven point numeric type scale was used to measure the opinion related questions, where 1 represented “Not at all” and 7 refers to “To a large extent”. The choice of 7 point scale is driven by two reasons. First, it has been successfully used in previous hotel outsourcing studies with an acceptable reliability (Lamminmaki, 2007; Espino-Rodriguez and Padron-Robaina, 2005a; 2005b; Lam and Han, 2004). Second, seven or more point is more suitable to multivariate analysis than smaller ranges (Tabachnick and Fidell, 2007). Other questions asked the respondents to indicate the actual figures relating to their hotel operations. The model to be tested includes a large number of interaction terms involving one variable and thus it can lead to serious multicollinearity problems (Erramilli and Rao, 1993). Following procedures recommended by Aiken and West (1991) and Cohen et al. (2003), all continuous variables were centered by subtracting the corresponding variable mean from each value. To test for multicollinearity, correlation matrix of dependent, independent and control variables and interaction terms was prepared. It appears that multicollinearity is not a concern in both tables as none of the correlation exceeds .70, the cut off level suggested by Pallant (2006).

RESULTS

Initial standard multiple regression was performed between level of outsourcing as the dependent variable and the four types of asset specificity: general specificity, procedure, temporal and site as independent variables. The R^2 is low at 5.2% (adjusted $R^2 = 4.7\%$). This implies that level of outsourcing is modestly explained by the four asset specificity variables. Despite this, the model is statistically significant ($F = 10.994$, $p = .000$). In terms of contribution each independent variable makes to the prediction of the dependent variable, only general asset specificity was found statistically significant (Beta = -0.229 , $p = 0.000$). Therefore, partial support to Hypothesis 1 is found. Since general asset specificity is the only variable of asset specificity that supports the hypothesis, it will be used as the main variable to create interaction effects with the TCE moderators.

In order to examine the effects of all groups of independent variables on level of outsourcing as dependent variable, hierarchical multiple regression analysis was conducted. Tolerance and Variance Inflation Factor (VIF) were examined and multicollinearity was not a concern. The results are used for testing all the remaining hypotheses. The control variables were entered at step 1. At step 2, all independent variables were included. Then, all 2-way interaction effects based on the hypothesized relationships were entered at the 3rd step. Results of the test are provided in Table 2.

It appears that control variables did not provide any significant explanation to the model. When the independent variables have been included, the model as a whole explains 25.8% (Adjusted $R^2 = 0.216$, $p < 0.001$). Then, once interaction terms were introduced in step 3, they did not significantly add any predictive power to the model.

To find out how well each variable contributed to the equation, standardised coefficients (Beta) were examined. Five variables make statistically significant contribution ($p < 0.05$). In the order of importance, these include level of profit (Beta = -0.332 , $p < 0.001$), general asset specificity (Beta = -0.192 , $p < 0.005$), supplier competition (Beta = 0.192 , $p < 0.005$), hotel experience (Beta = -0.181 , $p < 0.005$), and capital requirement (Beta = 0.163 , $p < 0.05$).

The results provide support to hypotheses 1 and 5, of TCE although only partial support was found for asset specificity. Consistent to the result of initial standard multiple regression, general asset specificity was confirmed to have inverse relationship with the level of outsourcing as hypothesized. This means the sample hotels hesitate to outsource anything that requires high asset specificity. Furthermore, level of competition among suppliers in the market was also found to explain level of outsourcing indicating that level of outsourcing increases if there are more suppliers competing to provide the service that the hotel can select from.

Three hypotheses of production cost theory including capital requirement (H6), hotel experience (H8) and profitability (H9) were confirmed. As predicted, it was found that capital requirement was positively related to level of outsourcing. This indicates that hotels are reluctant to operate in house any activity that needs a high level of capital commitment. On the other hand, the level of direct profit of the activity was found to have a negative effect on level of outsourcing. In other words, hotels would be unwilling to outsource any activity that can generate high direct income. Level of profit was reported as making a higher contribution to the model than any of the variables. Likewise, as hypothesized, hotel experience was confirmed to relate negatively to the degree of outsourcing. It was expected that hotels would hesitate to outsource anything in which they have operation experience and would prefer to outsource what they lack operation know-how and experience.

Table 2
Results of hierarchical multiple regression

Step	Variable	Beta	Std. Error	<i>t</i>	<i>F</i>	<i>R</i> ²	<i>R</i> ² _{adj}	<i>R</i> ² change	Hypothesis Support (Yes/No)
Step 1	<i>Control variables</i>				0.977	0.012	0.000	0.012	
	Level of service	−0.023	0.138	−0.314					
	GM's discretion to outsource (Yes)	0.070	0.115	1.176					
	Types of management (International)	−0.063	0.123	−0.973					
Step 2	<i>Independent variables</i>				6.128	0.258***	0.216	0.246***	
	General asset specificity	−0.192**	0.033	−2.896					H1 = Yes
	Behavioural uncertainty	0.103	0.036	1.652					
	Operational requirement uncertainty	0.108	0.032	1.637					
	Volume uncertainty	0.100	0.039	1.522					
	Frequency	0.068	0.198	0.922					H7a = No
	Availability of suppliers	0.192**	0.028	3.046					H5 = Yes
	Capital requirement	0.163*	0.037	2.320					H6 = Yes
	Hotel experience	−0.181**	0.037	−2.820					H8 = Yes
	Level of profit (square root)	−0.332***	0.040	−4.198					H9 = Yes
	Guest contact	0.066	0.029	1.022					H10 = No
Step 3	<i>Interaction terms</i>				4.438	0.263***	0.204	0.005	
	GAS X Behavioural uncertainty	0.027	0.018	0.447					H2 = No
	GAS X Operational requirement uncertainty	0.043	0.016	0.679					H3 = No
	GAS X Volume uncertainty	0.015	0.019	0.240					
	GAS X Frequency	−0.007	0.099	−0.099					H4 = No
	Capital requirement X Frequency	−0.051	0.101	−0.773					H7b = No

Remarks: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$ Dependent variable: Level of outsourcing Sample size : 811 for all variables except 269 for Level of profit

CONCLUSION AND DISCUSSION

This study examined the effects of factors on hotel outsourcing by drawing on TCE, production cost and service nature perspectives. The result showed some support for TCE and more support to production cost. The effects of TCE on outsourcing decisions were marginally overshadowed by production costs. The result is consistent with Walker and Weber (1984) and Ang and Straub (1998). Production costs were particularly prominent, indicating that outsourcing decisions of the hotels were rationalized based on operational cost saving as well as profit maximization.

In terms of TCE, only general asset specificity and supplier competition received support. This means that other elements of asset specificity are not important to the outsourcing decisions probably because, unlike general asset specificity measure, they created low sunk cost. Furthermore, the result of supplier competition supports previous literature such as Bello *et al* (1997) and Walker and Weber (1984). The managers may have recognized that low supplier competition led to contracting difficulties. Results support to the production cost argument put forward by Bello *et al* (1997). The findings of capital requirement are to some extent in line with Erramilli and Rao (1993). The hotel experience result confirmed the production hypothesis but it contradicted Walker and Weber (1984)'s contention for positive relationship of buyer experience and outsourcing based on transaction cost perspective. The result of this variable may indicate that the experience of the organization affects its production costs more than transaction costs. The costs of productions in the hotels seemed to be driven mainly by these two factors. The profit level of the activity appeared to be the most influential factor. This result reinforced the profit maximization rationale of the hotel managers who aimed to retain all possible premium profits in-house.

The insignificant effects of uncertainty variables illustrate that they are of little concern to managers when making outsourcing decisions. Frequency or volume of work also had insignificant effects. It was measured mainly by number of employees. This has two implications. First, unlike capital investment, labor costs in Thailand are relatively affordable, as were confirmed during the exploratory study. Secondly, the size of work as indicated by number of employees may not relate to economies of scale as much as capital investment. In addition, guest contact also revealed no effect. It was of no concern because, as noted in the preliminary study, hotels would carefully select the most trustworthy contractor in dealing with guest contact service, if outsourcing was preferred.

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**AN INVESTIGATION OF COLLEGE STUDENTS' SELF-REPORTED FOOD SAFETY KNOWLEDGE
AND SKILL RATINGS AND ACTUAL FOOD SAFETY BEHAVIORS AND KNOWLEDGE**

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ABSTRACT

Food safety knowledge and behaviors of young adults are concerns of the hospitality industry and hospitality educators. This study explored college students' food safety perceptions, knowledge, and behaviors and how the following factors impact them: relevant courses, foodservice experience, and certification. Participants were 164 students recruited from an entire university's student population. Food server experience was significantly related to self-rated knowledge; food preparer experience was significantly related to self-rated skills. Females had significantly higher behavior "score" than males. Only the correlation between behavior "score" and self-reported skills was significant. Findings provide useful information regarding approaches to education, training, and practice.

Key Words: food safety, knowledge, behaviors, experience, certification, food preparer

INTRODUCTION

College students who may be living away from home for the first time are taking on more responsibilities as young adults and may be more connected with issues related to their health, including concerns about the safety of the foods they eat. Understanding food safety issues as they relate to this population is also important to the hospitality industry; a major employer of college students. In addition, foodservice education/training programs can be designed and delivered more effectively if more is known about the knowledge, skills, behaviors, and perceptions of food safety among college students. To understand more about this population, this study explored college students' food safety perceptions, knowledge, and behaviors, and investigated what factors impact those variables.

PURPOSE OF STUDY

Few research studies have been conducted that focus on young adults' food safety knowledge and skills and/or on reported or actual food handling behaviors. One could hypothesize that relevant coursework, foodservice experience, food preparation experience, and food safety certification are necessary components for increasing individual knowledge and skills about food safety; and, further hypothesize that if an individual's food safety knowledge and skills are strong, they translate into appropriate and safe food handling behaviors and practices. However, currently, insufficient data exist to support this hypothesis. Therefore, the purpose of this study was to examine factors, such as relevant courses, work experience, and certification and their relationship to self-reported food safety knowledge and skill ratings and actual food safety behaviors and knowledge. The study's objectives are:

1. To determine if there is an association between demographics and knowledge and skill factors (relevant courses, such as nutrition, food science, and microbiology; food server experience; food preparer experience; or food safety certification) and young adults' self-rating of food safety knowledge and skills.
2. To determine if there is an association between demographics and knowledge and skill factors (same as listed in Objective 1) and young adults' actual food safety behaviors and knowledge.
3. To compare students' self-rating of food safety knowledge and skills to actual food safety behaviors and knowledge.

The importance of these research questions is based on the premise that increasing the understanding of the overall health practices of young adults is significant to society and, more specifically, to hospitality educators who

teach these students. Food safety knowledge and behaviors are also critically important to an industry that employs a large number of individuals who are 18-25 year-olds.

REVIEW OF LITERATURE

Food safety is a major health concern for young adults and a key concern for the hospitality industry and society as a whole. Centers for Disease Control and Prevention (CDC) estimated that foodborne illness causes 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths each year (Mead, Slutsker, Dietz, McCaig, Bresee, Shapiro, et al., 1999; CDC, 2001). Previous studies have shown that food safety knowledge, attitudes, and behaviors of various groups within the U.S. population vary. According to one study, while the knowledge of food safety issues for males, young adults, occasional food preparers, and people with more than 12 years of education was generally the same as the overall sample, their self-reports of food safety practices were lower (Altekruse, Street, Fein, & Levy, 1996). In another study, men, individuals with no children, and individuals 18 to 24 years old were less likely than other groups to rate product safety as “very important” (“USDA/ERS”, 2002). Researchers note that the disparity between food safety knowledge and practices of consumers may be attributed to optimistic bias effects; people believing they are less likely to be at risk than others (Miles, Braxton, & Frewer, 1999).

Information about food safety knowledge, perceptions, and behaviors of young adults was obtained by Byrd-Bredbenner, Maurer, Wheatley, Schaffner, Bruhn, and Blalock (2007) through a nationwide online food safety survey. Those sampled were found to be most knowledgeable about the following food safety concepts: population groups that are at greatest risk for foodborne disease, common foods associated with foodborne diseases, and cross-contamination and disinfection procedures. Areas where the sample possessed the least knowledge were safe times and temperatures and foodborne disease pathogens. Males scored significantly lower than females on all but the food disease pathogens scale. Although food safety is an important issue, these results demonstrate that young adults, especially young males, had several deficiencies in their knowledge regarding this subject. However, young adults in the survey were found to hold very positive beliefs that cleanliness/sanitation was important. Their self efficacy (confidence in their ability to practice recommended food safety behaviors) was also high and locus of control results showed that most believed avoiding foodborne illness is controlled by internal factors.

Researchers evaluated the food handling practices of young adults to determine how well their food safety performances complied with FightBac! safe food handling recommendations (Byrd-Bredbenner, Maurer, Wheatley, Cottone, & Clancy, 2007a). The objectives of the study were not revealed to the students who prepared chicken fajitas and uncooked salsa individually in a controlled kitchen laboratory setting. Using an observation instrument, trained researchers observed and recorded the students’ food handling practices during their preparation of these foods. Approximately half of the recommended safe food handling practices were performed by the young adults in the study. Also, when hand washing was evaluated, the young adults were seen performing only 25% of recommended hand washing practices. While reported hand washing knowledge from the online survey was high at 73%, only 36% knew the most hygienic way to wash hands and of those, just 25% were observed doing it ($p<0.0001$), indicating that food safety knowledge does not always translate into correct behaviors (Byrd-Bredbenner, Maurer, Wheatley, Cottone, & Clancy, 2007b).

Research on food safety knowledge and behaviors has probed whether food safety education and training translates into appropriate behaviors. One study found that people had better knowledge about food safety if they had taken at least one college course that included food safety information; however, education did not have a big impact on changing their actual food handling behaviors (Unkelsbay, Sneed, & Toma, 1998). Also, 75% of Spanish college students who were primarily health sciences majors reported not performing basic food safety practices (Garayoa, Cordoba, Garcia-Jalon, Sanches-Villegas, & Vitas, 2005). A 2001 report summarizing data from 12 national and regional surveys stated that most consumers report that they are knowledgeable about food safety and that they use safe food handling practices. However, when observed, they did not always use safe food handling practices (Research Triangle Institute, 2001). It appears that knowledge does not necessarily translate to correct food handling behaviors. The research discussed in this study investigates this issue further in a sample of young adults.

METHODS

Sample and Study Design

Students were recruited from an entire university campus to participate in the study. Recruitment took place over a two-week period from February 26 to March 7, 2007. Thirty-seven dietetic students from a community

nutrition course assisted in the recruitment process by placing recruitment tables in the primary buildings throughout the campus (i.e., student center, main library, fitness center, main dining facilities, residence halls, major classroom buildings). Additionally, students posted approximately 250 inviting posters around campus and near the recruitment tables. The volunteers explained the study and invited students to participate. Students received a card with the website address where an on-line survey was located or, if interested, were given a pen and paper survey to complete at that moment. Moreover, dietetic students developed a Facebook page to inform and invite students to participate in the study via the website and six large banners (4' x 8' 2-color) were hung in the main access areas to the largest residence halls and dining facilities on campus informing students about the study and website.

Variable Definitions and Analysis Methods

The survey questions examined in this study were categorized in four major areas: demographics, knowledge and skill factors, self-reported actual food safety behaviors and knowledge, and self-rating of food safety knowledge and skills. The demographic questions included gender, year in college, and race/ethnicity. The knowledge/skill factors included: 1. how many nutrition, food science, or microbiology courses they had completed; 2. had they held a job as a food server or food preparer; and 3. did they hold any food safety certifications.

The actual food safety behavior questions included washing hands with soap before preparing food and washing hands with soap after going to the bathroom. A binary value of 1 was applied to those responses that indicated they “always” washed their hands with soap and a value of 0 was given to those responses that did not “always” practice this behavior. These two dichotomized variables were then summed to create an overall food safety behavior “score” with values 0, 1, and 2, indicating the total number of correct answers each respondent had to the two questions.

The six actual knowledge questions were also assigned a binary value of 0 or 1. A value of 1 was applied to the correct response to each of the following questions: 1) temperature for cooked ground beef, 2) temperature for cooked chicken, 3) best way to determine hamburger doneness, 4) time in which leftovers should be refrigerated, 5) longest amount of time packed lunches can be left out of the refrigerator, and 6) best way to wash hands. A value of 0 was given to incorrect responses. The six dichotomized variables were then summed to create a food safety knowledge “score” with values 0, 1, 2, 3, 4, 5, and 6, indicating the number of correct answers to the six questions.

For the first logistic regression analysis, the variables for the self-rating of food safety knowledge and food safety skills were each dichotomized and assigned a binary value of 0 or 1 since the frequencies of observations within extreme categories (poor, excellent) were too small. A value of 0 was applied to responses of “poor” or “fair” and a value of 1 was given to responses of “good” or “excellent”. Then binary logistic regression was used to determine if there was an association between demographic characteristics (gender, school year, and race), knowledge/skill factors (relevant courses in nutrition, food science, and microbiology; food server experience; food preparer experience; or food safety certification) and the two dependent variables: young adults’ self-rating of food safety knowledge and young adults’ self-rating of food safety skills.

For the second regression, the last two categories of the food safety knowledge “score”, 5 and 6, were combined into one category because of small frequencies. Then ordinal logistic regression was used to determine if there was an association between demographic characteristics (gender, school year, and race), knowledge/skill factors (relevant courses in nutrition, food science, and microbiology; food server experience; food preparer experience; or food safety certification) and the two dependent variables: young adults’ self-reported actual food safety behavior and young adults’ self-reported actual food safety knowledge. In the last part of the analysis, Spearman correlation coefficients between the self-rated food safety knowledge and skills and actual food safety behavior and knowledge “scores” were computed. All statistical tests were performed using SPSS 15.0.

RESULTS

Sixty-seven students completed the survey via the website and 97 students took the survey by pencil and paper for a total of 164 participants. The majority of students were freshmen (55%); while 23%, 10% and 12% were sophomore, juniors, and seniors, respectively. Sixty-three percent were females and 37% were males. Ethnicity/race of the study population was 90% white and 10% was “other”. Twenty percent had one or more courses in nutrition, food science, or microbiology; 34% had food server experience; 21% had food preparer experience; and 8.5% had a food safety certification.

Binary logistic regression was conducted to determine if there were statistical differences in young adults' self-rating of food safety knowledge and skills in relation to demographics and the knowledge/skill factors. The results (Table 1) found that of the four knowledge/skill factors only food server experience was significantly related to self-rated food safety knowledge (odds ratio [OR]=2.295, $p=0.048$), and only food preparer experience was significantly related to self-rated food safety skills (OR=3.32, $p=0.019$). In addition, the food safety knowledge regression model also found that food preparer experience had a high odds ratio (2.522) that was comparable to the odds ratio for foodservice experience, but was only marginally significant, $p=0.081$. All demographics in both models had small odds ratios (0.956-1.216 for knowledge and 1.060-1.527 for skill). In both the food safety knowledge and skills model, odds ratios close to 1 were also found for food safety certification and relevant courses.

Table 1
Associations between Self-rated Food Safety Knowledge and Skills and Demographics and Knowledge/Skill Factors among College Students as Measured by Odds Ratios (ORs) in Binary Logistic Regression Model

Variables	Self-Rated FS Knowledge		Self-Rated FS Skills	
	Odds Ratio	<i>p</i> value.	Odds Ratio	<i>p</i> value
Demographics				
Gender	1.106	.784	1.527	.242
School year	.956	.801	1.124	.507
Race/ethnicity	1.216	.729	1.060	.917
Knowledge Skill Factors	1.193	.714	.762	.558
Relevant courses in nutrition, food science, and micro				
Food server experience	2.295	.048	1.039	.924
Food preparer experience	2.522	.081	3.320	.019
Food safety certification	1.347	.688	1.109	.880

■ = Significant difference at $p < 0.05$

Table 2 reveals that 45.1% of the students reported that they “always” washed their hands with soap before preparing food and after going to the bathroom. However, 43.3% of the students only correctly answered two, one, or none of the questions. Only 29.9% correctly answered three questions, and just 26.9% of the students correctly answered 4 or more of the questions.

Table 2
Frequency and Percent for Number of Correct Answers to Survey Questions on Food Safety Behavior and Food Safety Knowledge

Number Correct Answers	Food Safety Behavior “Score”		Food Safety Knowledge “Score”	
	n	%	n	%
0	41	25.0	9	5.5
1	49	29.9	19	11.6
2	74	45.1	43	26.2
3			49	29.9
4			36	22.0
5			7	4.3
6			1	0.6


An ordinal logistic regression analysis of respondents' food safety behavior “score” as the dependent variable and respondents' demographics and four knowledge/skill factors as the independent variables found an association with gender only (see Table 3). Young adult females were significantly associated with a higher food safety behavior “score” than males ($p=.004$). An ordinal regression analysis using the food safety knowledge “score” as the dependent variable found no associations with demographics and the four knowledge/skill factors.

Spearman correlation coefficients between the self-rated food safety knowledge and skills and actual food safety behavior and knowledge were computed. The correlations were all positive but very small, varying in values

from 0.027, between food knowledge “score” and self-reported food skills, to 0.161, between behavior “score” and self-reported food skills. Only the correlation coefficient between behavior “score” and self-reported food skills was statistically significant at the 0.05 level ($p=0.04$) (see Table 3).

Table 3
Associations between Food Safety Knowledge and Skill “Scores” and Demographics and Knowledge/Skill Factors as Measured by Odds Ratios (ORs) in Binary Logistic Regression Model

Variable	Food Safety Behavior “Score”		Food Safety Knowledge “Score”	
	Odds Ratio	<i>p</i> value.	Odds Ratio	<i>p</i> value
Gender				
Female	2.633	.004	0.965	.909
Male				
School year				
Freshman	0.559	.265	0.816	.676
Sophomore	0.814	.719	0.735	.562
Junior	1.090	.896	0.691	.550
Senior				
Race/ethnicity				
White	0.777	.631	1.490	.410
Other (Black, Hispanic, Asian)				
Relevant courses in nutrition, food science, and microbiology				
Yes	1.948	.113	1.074	.857
No				
Food server experience				
Yes	0.753	.428	1.357	.366
No				
Food preparer experience		.100		.280
Yes	2.036		1.540	
No				
Food safety certification		.890		.756
Yes	1.084		0.845	
No				

 = Significant difference at $p < 0.05$

DISCUSSION

The primary purpose of this study was to determine if certain knowledge and skill factors, such as relevant courses, foodservice experience and food safety certification, are related to young adults’ self perception of their food safety knowledge and skills and to their actual food safety behaviors and knowledge. While perception of one’s knowledge and skills regarding food safety practices is advantageous, even more importantly is one’s ability to translate knowledge and skills into safe and appropriate food handling practices when given the opportunity.

In this study, the examination of young adults’ perceptions of food safety knowledge and skills based on self-ratings revealed that foodservice experience was the only associated factor. These results indicate that actual work experience with food (as a food server or food preparer) affected students’ perception of their knowledge and skills concerning food safety; whereas, relevant academic courses and food safety certification did not. This is an interesting finding given that hospitality academic programs frequently offer courses in food safety that incorporate certifications, and some students take related courses in nutrition and food science. This somewhat differs from a previous study of college students with at least one class in food safety (Unklesbay, Sneed, & Toma, 1998).

An crucial finding in this study was that only 45% of the students reported that they “always” washed their hands with soap before preparing food and after going to the bathroom. This was significant for female versus male respondents. However, this is higher than a previous study that observed only 25% of college students performing recommended hand washing practices while preparing food (Byrd-Bredbenner, Maurer, Wheatley, Cottone, &

Clancy, 2007b). Similarly, among Spanish university students with primarily a health science major, only 24% affirmed that they washed their hands with soap and water when preparing food (Garayoa, Cordoba, Garcia-Jalon, Sanches-Villegas, & Vitas, 2005). In a 2000 survey of supermarket shoppers, 60% of respondents thought that washing their hands and food preparation surfaces were the most important actions they could take to keep food safe from germs.

This study's finding on food safety behavior of males and females supports previous studies that have reported less appropriate food handling and food safety behaviors by males and/or young adults. Redmond and Griffith (2004) found that younger adults were associated with an overall negative attitude towards implementation of food safety behaviors, with a significant difference in cumulative responses between males and females. College men were particularly prone to unsafe practices with regard to meat and egg preparation practices (McArthur, Holbert & Forsythe, 2006). Shiferaw, et al (2000) found that young adults (18-25 year olds), males, and individuals with higher education engaged in fewer safe food handling behaviors such as reading labels, washing hands, and washing cutting boards after handling raw meat. In another study, unsafe food handling practices were more often reported by men, young adults (18-29 year olds), and occasional food preparers than by women, persons over 30 years of age, and frequent food preparers (Altekruse, Yang, Timbo & Angulo, 1999). Perhaps part of this can be explained using a "technological/ lifestyle" theory (Frewer, Shephard & Sparks, 1994; Miles, Brennan, Kuznesof, Ness, Ritson, & Frewer, 2004). According to this theory, consumers believe that they have more control over lifestyle hazards such as nutrient consumption and personal hygiene than technological hazards such as food irradiation and genetically modified food, thus perceiving lifestyle hazards as posing less risks than technological hazards. This study compares to other studies that found men more likely to report risky food handling practices (Albrecht, 1995; Altekruse, Street, Fein & Levy, 1996; Klontz, Timbo, Fein, & Levy, 1995; Meer & Misner, 2000).

In general, research has shown that there is a direct relationship between attitude and behavior (Fishbein & Asjen, 1975; Asjen & Fishbein, 1980; Cialdini, Petty, & Cacioppo, 1981). However, what is interesting in the area of food safety is that consumers tend to overestimate their knowledge of food safety and underestimate the actual occurrence of food borne illnesses (Knight, Harris, Todd, Worosz, & Kennedy, 2008). This study found that students' self-rating of their food safety knowledge was not related to their actual food safety behavior and knowledge "scores". Additionally, students in this study who had taken relevant courses in nutrition, food science, and microbiology or who had obtained a food safety certification were not more knowledgeable in food safety practices and did not possess better food safety behaviors than those who had not. This finding is similar to McArthur, Holbert and Forsythe's study (2006), which found no significant difference in the safe food handling practice scores of students majoring in health related disciplines and those majoring in other disciplines. Previous research indicates that respondents' knowledge of food safety terms or concepts does not necessarily correlate with safe food handling practices (Williamson, Gravani, & Lawless, 1992).

This study found a disparity between relevant academic courses and food safety certification and actual food safety behaviors and knowledge. Perhaps food safety courses and certification workshops should involve hands-on experiences rather than just classroom lectures and activities. Experience has proven to be an excellent way to learn, so perhaps it would be wise for food safety educators to involve students directly with food preparation practices and to take them into foodservice operations to emphasize real-world food safety issues. Perhaps simply grasping facts and viewing videos or other media sources about food safety statistics are not enough to make food safety important to students. Instead it appears from these data that students need actual experiences with food to understand the significance of food safety and to recognize their own knowledge and skills in this important area of hospitality education. This study also continues the question of whether differences in safe food handling practices seen across demographic groups necessitate targeted education strategies for young adults and males.

Perhaps food safety behavior is not so different from what is being learned in other areas of hospitality and tourism. One might expect that visitors to eco-resorts would be environmentally aware and participate in all of the sustainable management practices available at the resort, however research results have found otherwise and guests indicated that they did not engage in those behaviors primarily because they were not truly aware of them (Lee & Moscardo, 2005). Research has suggested that even though tourists held positive attitudes about the environment that these were not sufficient to impact their actual behaviors and that even more information about the environment and satisfying visits to ecologically oriented resorts would help to promote more responsible behaviors with regard to the environment (Beaumont, 1999; Firth & Hing, 1999; Lee & Moscardo, 2005). According to Hines, Hungerford

and Tomera (1987), factors related to environmentally responsible behaviors include: knowledge of issues; knowledge of action strategies; locus of control, which refers to an individual's perception of whether or not he or she has the ability to bring about change through his or her own behavior; attitudes; verbal commitment, or an expressed intention to act upon an environmental problem; and an individual's sense of responsibility.

It is worth noting that in spite of the heavy recruitment of students into this study, one limitation of this study is the small sample size. Overall, there appeared to be so much "noise" and activities on campus that it proved to be difficult to get students to slow down, take interest in the topic, and participate in the study. This limitation was somewhat offset by recruiting on the entire campus, not just in specific courses that would have skewed the study to certain groups and majors. Also, because the results of the study were confined to a sample of students at one university they cannot be generalized to all college students.

IMPLICATIONS FOR HOSPITALITY EDUCATION AND THE INDUSTRY

This study's exploration of such factors as relevant courses, work experience and food safety certification with regard to students' self-reported food safety knowledge and skill ratings and actual food safety behaviors and knowledge has found few associations. This finding is in itself disconcerting since hospitality programs and the hospitality industry place much value on academic courses and certifications that teach food safety facts and safe food handling practices. While this is only one study, it is strongly supported by similar research findings. It brings up the question of how academic courses and certification training can be more effective in teaching food safety facts that will be recalled and implemented in individual's daily behaviors, whether at home or at work. The findings from this study support the notion of food safety educators engaging students with real-world food preparation practices and experiences in industry locations. Also, as a study by Medeiros, Hillers, Kendall, and Mason (2001) demonstrated, messages conveyed in food safety education programs may need to be targeted specifically towards changing behaviors that are major factors in controlling the spread of foodborne diseases. These factors include teaching people to focus on personal hygiene, adequate cooking, eliminating cross-contamination, maintaining food at safe temperatures, and obtaining food from safe sources. Perhaps, as others have noted (Altekruse, Street, Fein, & Levy, 1996), young adults may need to have a concrete awareness of a food vehicle for a particular pathogen and specific knowledge may then translate into safer food handling. This study also supports the concept of targeted education and training of males and/or young adults in order to improve awareness and knowledge of food safety hazards and increase participation in safe food handling practices on a constant basis.

This research adds to the body of knowledge that indicates that food safety knowledge taught in courses and training programs is not always retained and does not necessarily translate into safe food handling practices. More work is needed on specifically what types of educational programs benefit particular sub-groups of the population. Further research investigating the impacts of incorporating real-world food preparation experiences into training, educational, and certification programs on actual food handling practices of various sub-groups of the population could be a useful next step towards understanding how to positively change these behaviors.

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**IS IT A GOOD HOTEL? IS IT A GOOD DEAL? WILL THE HOTEL SELL OUT? THE PECULIAR
IMPACT OF ROOM RATE SIGNALING ON CONSUMERS' EXPECTATIONS AND HOTELS'
REVENUE MAXIMIZATION**

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ABSTRACT

This empirical study explored price signaling in an advanced booking environment, and the ramification for hotel revenue management. Specifically, it examined the impact of an intensified signaling scheme where uncertainty was elevated and customers' perceptions about the room rate were magnified. It was demonstrated that high quoted rates affect customers' perceptions, their propensity to book, and consequently the hotel's revenues. Surprisingly, it was found that as the signal intensifies, the impact of the high room rate signal on the sellout risk perception reverses its direction, suggesting that the role of price signaling is considerably more complicated than anticipated.

Key Words: price signaling, revenue management, advanced booking

INTRODUCTION

Early studies by economists such as Gabor and Granger (1966), Leavitt (1954) and Tull, Boring, and Gonsoir (1964), followed by the celebrated Information Theory models of Akerflov (1970) and Spence (1973), and many recent publications such as Bagwell and Riordan (1991), Fluett and Garella (2002), Kalita, Jogpal and Lehman (2004), Kirmani and Rao (2000) and Tirole (1991) all associate price with product quality. Information Theory in economics argues that high quality sellers in markets where consumers have partial information, signal to the consumers that their products and services are of higher quality by quoting higher prices. In other words, consider a market with less than perfect information. The market consists of multiple sellers that deliver products and services with various levels of quality, and of consumers who face an important purchase decision (such as a travel related one) but do not possess full information about the quality of the products before they make their decision. Under such imperfect information circumstances, the sellers of the high quality products differentiate themselves from the low quality sellers by charging higher **premiums**⁷. According to economic theory, by doing this, these sellers send a reliable signal to the uninformed consumer that their product is indeed of better quality. The price/quality signal is said to be reliable because the market conditions are such that cheating (that is, low quality sellers charging high fees, thus pretending to be of high quality) is not a sustainable profitable strategy. The high price as a signal of quality is a potentially costly expenditure and therefore can credibly communicate unobservable high quality because the cost associated with the signal will only be recovered in the future, once the product's true high quality is revealed. As was shown in many marketing and consumer behavior empirical studies, consumers have indeed grown accustomed to associate price with quality. Moreover, a recent study by Plassmann et al. (2008), demonstrated that higher prices increase not only the way people perceive and report quality, but also the activity of their brain's "pleasure center" as measured using functional magnetic resonance imaging (fMRI). In other words, higher price for the same product (wine) resulted in more blood and oxygen sent to the medial orbitofrontal cortex, the brain area believed to reflect experienced pleasantness during experiential tasks.

Price quality signaling is also found in tourism related economic transactions where prospective customers often have imperfect information, and where the conditions are such that a price/quality signaling strategy is called for. Various theoretical and empirical studies underscored the relevance of this price/quality association in

⁷ Not to be confused with higher prices that simply reflect higher production costs.

hospitality and tourism. The theoretical studies emphasized the notion that in tourism, the *reputation mechanism* is insufficient to ensure quality, while the empirical studies provided ample evidence as to the existence of price quality association in various hospitality and tourism domains (see, for example, Ainscough 2005; Caserta and Russo, 2002; Harouthnian, Mistsis and Pashardes, 2005; Keane, 1996 and 1997; Mackay, 1989; Oh and Jeong 2004).

This study extends the literature on price signaling as follows. First, it empirically explores how the *intensity* of the price signal affects quality, and two additional consumer perceptions in the context of advanced booking of hotel rooms. The surprising findings are then linked to customers' propensity to book a room, using the advanced booking decision model, first suggested by Schwartz (2000). Second, the study revisits the theoretical proposition about the impact of price signaling on the hotel's ability to maximize revenues (Schwartz, 2006b). It is demonstrated how the empirical results about price signaling obtained in this study, could be incorporated into the analytical framework proposed in that study, hence, providing possible answers to several questions that were left unanswered.

The paper continues as follows. The second section outlines the theoretical background discussing the advanced booking decision framework, the signaling revenue maximization model and the initial experiment that tested price signaling in advanced booking context and that serves as a benchmark for this study's experiment and results. The third section describes this paper's notion of an *intensified price signal* and outlines the experimental design, data, methodology and hypotheses. The results and analysis section is followed by a discussion about the theoretical implications. The paper concludes by summarizing the study's findings, discussing the practical implications, and suggesting venues for future research.

THEORETICAL BACKGROUND AND PREVIOUS STUDIES

A recently published analytical model on advanced hotel room booking decisions by deal seeking consumers (Schwartz, 2000, 2006a and 2007) introduced two new perception elements which were not addressed earlier in the literature. These two perceptions, characteristics of hotel room bookings, were the customers' assessment of the likelihood of the hotel selling out before the date of stay the customers' assessment of the likelihood of the hotel quoting a lower price (for the same room for the same date of stay) as the hotel responds to demand estimates, and adjusts its quoted rates according to its revenue management policy guidelines⁸.

Empirical tests (Chen & Schwartz, in press a) showed that these two consumer perception elements are linked to changes in customer's propensity to book a room. That is, it was demonstrated that the perceptions about the sellout risk and the prospects of a better deal affect the behavior and the actual booking decision of these utility maximizing, deal seeking, customers. Specifically, the higher the perceived sellout risk, and the lower the likelihood of obtaining a lower quoted room rate, the more likely the deal seeking customer is to book the room, and cease waiting and/or searching for a better deal (for the same room at the same hotel). Acknowledging the importance of these two elements in shaping deal seeking customers' propensity to book, a series of studies explored various ways in which these two perceptions can be manipulated by the hotel, and consequently induce a higher propensity to book at any given room rate, that is, increase customers' willingness to pay and the hotel's revenues (Chen & Schwartz, in press a & b). This study continues this line of investigation as it explores the role of price signaling in shaping these consumers perceptions, i.e., the sellout risk and better deal perceptions that, in turn, affect the customers' propensity to book, and the hotel's revenues. In other words, price signaling can be considered as one more tool the hotel possesses in its arsenal when it tries to increase bookings by affecting the perceptions discussed above.

In a recent study, Chen, Ruseski and Schwartz (in press) explored the impact of price signaling in an advanced booking environment. First, it was established that although room rates variations could be attributed to revenue management practices, higher rates can still induce perceptions of higher quality in a controlled

⁸ Formally these two perceptions of sellout risk and the prospects of a better deal were coded as P_v and P_d respectively. Their role in the consumer booking decision is clear when one examines the equations for the switch points. P^* , the threshold room rate at which the consumer move from responding with a booking decision to a given room rate to responding with a "Book and continue to search for a better deal" strategy is given by $P^* = -\frac{S_n}{(D-F)P_d(P_v-1)}$ while P^{**} , the threshold room rate at which the consumer move from responding with a "Book and continue

to search for a better deal" strategy to a "Search only" strategy is given by $P^{**} = -\frac{P_v(P_b + R_d - R_b)}{F \cdot P_d(P_v - 1) - P_v}$.

environment where the other relevant factors were held constant. This finding supported previous empirical observations that price quality association exists in various sectors of the tourism industry. In addition, it was found in that study that price signaling impact the two consumer perceptions of sellout risk and the prospects of getting a better deal. Specifically, the results showed that higher room rates induced higher expectations for a sellout risk and higher expectations for being offered a better (lower) room rate in the future. In summary, it was shown that with regard to these two consumer perceptions, the high room rate signal has two contradicting effects. It **increases** the customers' willingness to book because it increases quality and sellout expectations, but at the same time, it **reduces** customers' propensity to book as it increase expectations for being offered a better deal in the future.

A different kind of model (Schwartz, 2006b) suggested that price signaling (quality and sellout risk) can affect the traveler's willingness to pay by shifting the demand curve, and consequently changing the optimal (i.e., the maximum achievable) revenue. The model demonstrated that the impact on the maximum achievable revenue (compared to a traditional, no-signaling, model) depended on the assumption one made about the nature of the signaling direct impact on the demand curve through its impact on the quality perceptions as well as the sellout risk perceptions. Accordingly, the second goal of this current study is to better understand how price signaling affects the quality and the other two consumer perceptions in an advanced booking environment, and specifically the resulting impact on the demand curve. This would allow for better understanding of the direction and magnitude of the impact the price signaling might have on the hotel's revenues, or more specifically, on the maximum achievable revenue.

EXPERIMENTAL DESIGN, HYPOTHESES AND METHODS

This study replicated the experimental design in Chen, Ruseski and Schwartz (in press) discussed above in the theoretical background section. This high level of similarity allows a meaningful comparison of the results in an attempt to explore that impact of the intensified signal conditions.

Data and Design

Ninety three subjects were recruited among undergraduate and graduate students in a large mid-west university. Participation was voluntary and no incentive was offered in this study. Participants were given a scenario according to which they, along with a group of their friends were to leave on a trip to Hawaii in three weeks time. According to the text, they were very excited about the trip and have volunteered to book the rooms for the group. After searching the Internet, they found the right place and were quoted a daily rate for their stay (this quoted rate was indicated in the text). This scenario was followed by three questions. First, the study participants were asked to indicate their expectation about the quality of their stay in that hotel (on a scale of 1-5 where 1 was poor quality, and 5 was exceptional quality). The following two questions referred to a situation according to which they decide not to book the rooms at that time and opted to try booking again in a later day, closer to their day of travel. The second question was about the likelihood of the hotel offering a rate lower than what they have been just quoted, and the third question was about the risk of the hotel selling out during that period. Both of these questions used a scale of 1-5 where 1 was very low and 5 was very high. The categorical independent variable was the quoted price with two levels: high (\$107) and low (\$57). The three dependent variables were the subjects' responses to the three expectation questions (quality, sellout risk and better deal). Subjects were randomly assigned to the two treatments with 47 study participants ending up being quoted the low room rate and 46 being quoted the high room rate.

Methods

Analysis was conducted using SPSS's (MANOVA like) GLM multivariate procedure and a polytomous universal model (the PLUM procedure). The GLM tests simultaneously the impact of the independent variable on all three dependent variables, effectively dealing with possible correlation among the three dependent variables. Hence, it was used to test the impact of the price signal on the three dependent variables simultaneously. A Type III sum of squares (equivalent to Yates' weighted-squares-of-means) was selected to estimate the unique contribution of each independent variable because the data were not balanced, and because there were no empty cells. Further, Type III SS deals directly with the marginal averages of the population means in each cell of the factor design matrix, thus making it considerably easier to interpret the results. SPSS's PLUM procedure was used to test the effect of the signal's strength, with the link set to logit, and the model including an interaction element (price x signal strength).

Intensified signal

This study deviated from Chen, Ruseski and Schwartz (in press) in a single major aspect. An attempt was made in this study to intensify the impact of the price signal by creating a "stronger" signal. This was accomplished

by introducing two changes that deal (at the same time) with the subjects' subjective assessment of their incomplete information and price perceptions. First, the level of incomplete information and participant's level of uncertainty regarding the quality of the hotel were intensified by omitting a portion of the text that provided the subjects with hints regarding the quality of the hotel. This portion of the text was included in the early study⁹. Second, a reference price was reported along with the quoted rate, so as to make the high price seem higher and low price seem lower¹⁰.

Hypotheses

Chen, Ruseski and Schwartz (in press) findings were expected to be replicated in this study. It was hypothesized that the price will impact all three perceptions in the same manner. The justification for these hypotheses remained the same as well. Price was expected to signal quality even in an advanced booking environment, where room rate variations can be attributed to the hotel revenue management policy. Many hotels tend to quote higher rates when they have a lower inventory of unsold rooms and consequently predict higher levels of occupancy at the relevant date of stay. As a result, hotel customers might associate higher room rates with a higher risk of a sellout. Finally, it was assumed that consumers have some kind of expectation about the possible distribution of quoted rates over time. The higher the quoted rate, the more it is likely to fall towards the right tail of that distribution of possible quoted rates. The more it is to the right, the more likely the consumer to believe that a lower rate (that is, a rate to the left of that quoted value) will be quoted some time in the future. Formally the first three hypotheses are as follows:

H₁: A higher room rate generates a higher expected quality of stay.

H₂: The higher the quoted room rate, the higher the perception of the likelihood of the hotel selling-out before the date of stay.

H₃: The higher the quoted room rate, the higher the expectations of being offered a better deal.

Since the price signal was intensified in this study (by adding a comment about the subjects' alleged internal reference price, and by removing the hints that alluded to the quality of the hotel) it is hypothesized that the impact of the price signal on the three perceptions will be enhanced. In other words, it is expected that the marginal averages of the population means in each cells of the factor design matrix will be larger compared to the values observed in Chen, Ruseski, and Schwartz (in press). Formally, hypotheses 4 is

H₄: The three variances hypothesized H₁, H₂, and H₃ will be larger than theses observed when the price signal conditions were not strengthened.

RESULTS AND ANALYSIS

The results (Figure 1) are more complex than anticipated. Hypothesis 1 is supported with a mean of 3.8 for quality expectation of subjects who were quoted a high room rate compared to 2.9 for customers who were quoted a low room rate. Also note that the quality expectations induced by the low room rate in this (intensified signal) scenario were lower than the expectations induced by the low rate condition in the benchmark study of Chen, Ruseski, and Schwartz (in press), while the expectations induced by the higher room rate were identical across the two studies. Hypothesis 3 about the prospects of a better deal is supported as well with an average of 2.4 for respondents who were quoted a high room rate compared with an average of only 1.7 for respondents who were quoted a low room rate. Also note that the high room rate better deal expectations in this intensified scenario were higher than those in the benchmark study, while the low rate (intensified signal) better deal expectations were lower than the benchmark study. Surprisingly, hypothesis 2 about the sellout risk was not supported. The high room rate respondents had an average of 3.4 -- **lower** than the average of the low room rate respondents (3.5). The General Linear Model test of between-subjects effects indicates that the differences between the averages are significant at the $p < .000$ level for all three dependent variables. The R^2 values were 0.95, 0.84 and 0.93 indicating that high

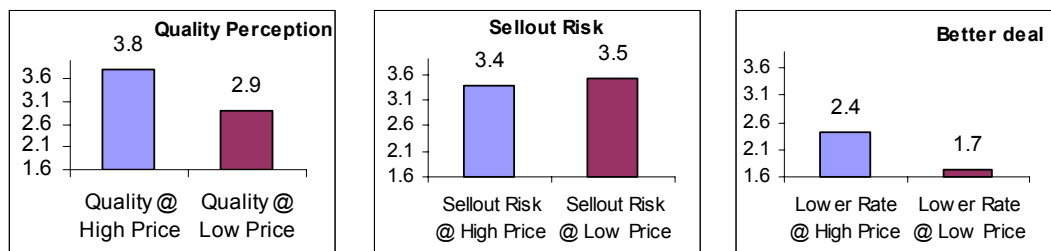
⁹ The omitted text was as follows: "The hotel ranked favorably by travelers who use the website tripadvisor.com. It is recommended by guests who stayed there recently and who share similar interests with you."

¹⁰ The text added for the high price treatment stated: "While you expected the room rate to be around \$50, the rate quoted for your dates of stay is \$107 per night". The text added for the low price treatment stated: "While you expected the room rate to be around \$100, the rate quoted for your dates of stay is \$57 per night".

portion of the variance is explained. The multivariate canonical tests of Pillai's trace, Wilks' Lambda and Hotelling-Lawley trace were all significant at $p < .000$.

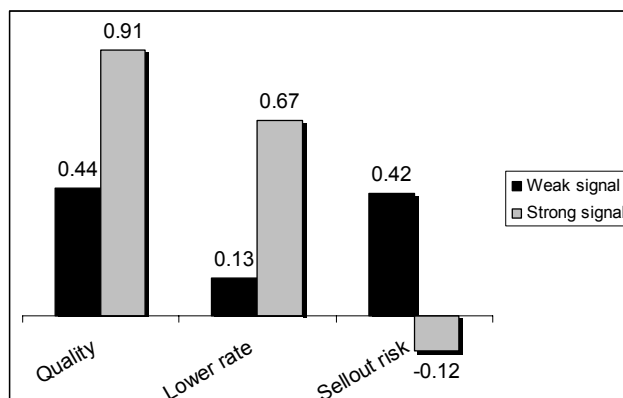
Figure 2 contrasts the intensified and the non intensified signal impacts, that is, it compares the three perceptions differences as observed in this study to the findings reported in the benchmark study of Chen, Ruseski, and Schwartz (in press). Note that the intensified price signal in this study generated a larger price signal impact on the participants' quality perception (0.91 compared with 0.44 in the benchmark study) and a larger price signal impact on the prospects of being offered a better deal (0.67 in this study compared with 0.13 in the benchmark study). However, the impact of the price signal on the sellout risk perception is not only smaller but it is also negative (-0.12 in this study compared with 0.42 in the benchmark study). This is because, as mentioned earlier, the high price signal generated a sellout risk perception that was lower than that generated by the low price condition.

Figure 1
Intensified Signal Induced Perceptions at High and Low Quoted Room Rates



The impact of intensifying the signal was tested using the polytomous universal model. Three models were fitted with quality, sellout risk and better deal perceptions as a categorical dependent variable (ordinal logit regression procedure). The independent variables included the price (categorical variable) and a categorical interaction variable of price and signal strength. In all three model the coefficient of the interaction element was statistically significant with $p < 0.05$. The estimated values were -1.27 for the quality model, -1.084 for the better deal model but a positive 1.148 for the sellout risk model. The Cox and Snell values of the pseudo R^2 were 0.187 for the quality model 0.067 for the better deal model and 0.026 for the sell out risk model. Hence, hypothesis 4 that the intensified price signal will have a larger signal impact on all 3 dependent variables is only partially supported.

Figure 2
The Average Difference between High and Low Room Rate Impacts on Perceptions, by Price Signal Intensity



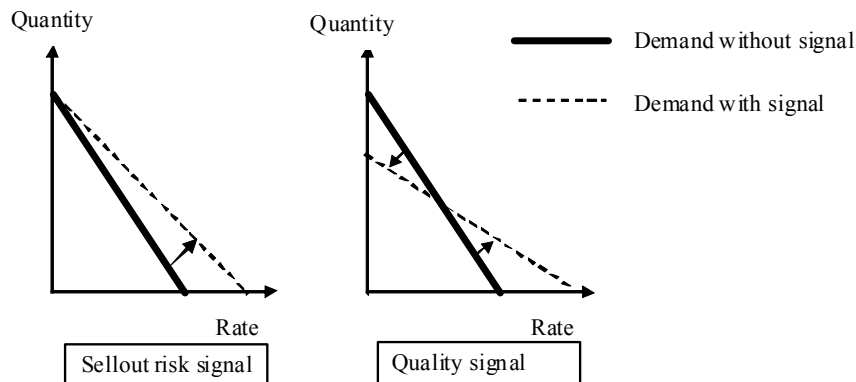
The reversal in the direction of the impact of the price signal on the sellout risk perception is not easy to interpret. A possible explanation has to do with the way the customers might associate high price with demand. The explanation provided in the benchmark study and (used in this study to form hypothesis 2) suggests that higher prices indicate to the consumer that the hotel is observing (and predicting) high demand. Hence, according to this school of thought, observed high demand drives high prices (as part of the hotel revenue management policy). It is this belief that indeed the hotel is observing high demand that increases the consumer's assessment of the risk of a

sellout because the higher the demand, the higher the likelihood of the hotel selling out. It is possible however, that another process exists where the consumers associate high prices with low demand. According to the basic demand model in economics theory, the higher the price the lower the demanded quantity. It follows that higher quoted rates will lead to lower occupancies, and therefore are associated with a **lower** sellout risk. The challenge is to explain why the second explanation (a typical demand curve downward price/quantity relations) prevailed over the first one when the signaling conditions were intensified, that is, when a reference price was provided and when hints about the quality of the hotels were omitted. A potential explanation is that the intensified signal is associated with elevated levels of uncertainty. Respondents might be more inclined to make assumptions about unobserved demand by interpreting prices when there is less uncertainty involved. So when uncertainty is increased, respondents are more likely to use the more familiar (safe) relation between price and quantities according to which higher prices lower the quantity demanded, rather than speculate that the higher demanded quantities result in the hotel quoting higher room rates.

THEORETICAL IMPLICATIONS

When contrasted with the findings of the benchmark study, this study's findings provide an interesting indication as to the manner in which the demand lines are shifting as a result of the signaling impact. The shift of the demand line induced by price signaling, and its' likely impact on the hotel's maximum achievable revenue was discussed in Schwartz (2006b). Schwartz speculated that in response to the signaling qualities of the quoted rate, the demand lines shift in a certain manner (that is, they re-position compared to a benchmark of a traditional, no signal, demand model). Figure 3 summarizes the 2 shifts as speculated in that article. The reasoning for the sellout risk demand shift was that the higher the quoted rate, the higher the induced perception of sellout risk and consequently the higher the shift in demand. Hence, when the room rate is zero there is no signal impact on demand. When the room rate is high (e.g., where the demand line crosses the x axis) the impact (the shift) is the largest.

Figure 3
Demand Line Shifts Due to Signaling as Postulated in Schwartz (2006b)



The reasoning provided for the quality signal impact was that the consumer compares the quoted rate to a reference price that s/he expects to be quoted. If the quoted rate is sufficiently higher than the reference rate, it signals a high quality (i.e., induces expectations for higher quality and consequently shifting the demand line upward). If the quoted rate is sufficiently lower than the reference rate, it signals a low quality (i.e., induces expectations for lower quality, and, consequently, shifting demand downward).

It is interesting to explore what the empirical findings of this study indicate as to the direction of the linear demand shift and how it compares with the speculated demand shifts in Schwartz (2006b). First consider the quality signal. Both the benchmark study and the current study found that quality perceptions are influenced by the quoted rate. That means that some shifts of the demand line are to be expected. When comparing the perceptions recorded in the current study to the benchmark, it is evident that as signal intensifies, the impact on quality perceptions is stronger when the room rate is lower.

As illustrated by Figure 4, the findings provide strong support to the quality signal speculation in Schwartz (2006b) that the slope of the demand curve is indeed smaller, and that it would intersect the no-signal linear demand line. However, this study's empirical findings do not seem to support the sellout risk (signal induced) shift as speculated in Schwartz (2006b). Figure 5's shift is different from the sellout risk shift depicted in Figure 3 in that it intersects the less intense signal (or, for that matter, the no-signal) line. This means that the price/sellout risk signal can either increase or decrease consumers' propensity to book. If the room rate is sufficiently high, it will decrease the consumers' propensity to book, but a low rate signal will increase the customers' propensity to book.

The implication for revenue maximization is that the maximal levels reported in Schwartz (2006b) need to be re-calculated. First, these revised equations should take into consideration the new, empirically supported, assumption about the nature of the sellout risk signal induced shift of the demand curve. Second, and as important, is the need to include in these calculations the impact of the price on consumers' perceptions about the prospects of getting a better deal. This aspect was not addressed in Schwartz (2006b) and the empirical evidence of this current study suggests that it should not be ignored. Unfortunately, this task, of revising the model in Schwartz (2006b), is after all beyond the scope of this paper, and it is hoped that future research will address these very interesting questions.

Figure 5
The likely shift in demand due to sellout risk perception impact

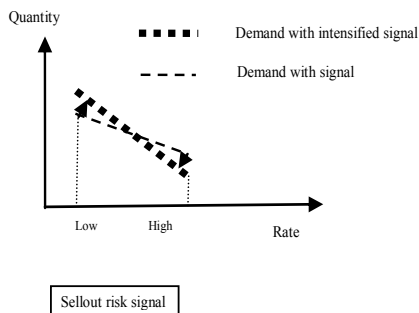
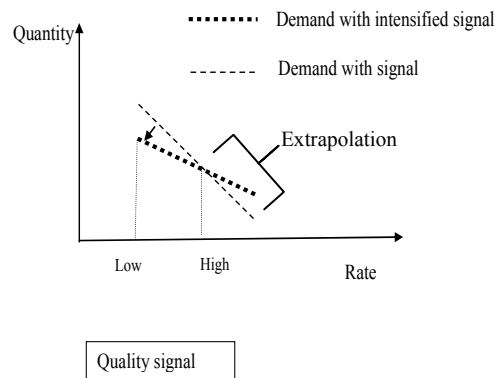


Figure 4
The likely shift in demand due to quality perception impact



CONCLUSION, PRACTICAL IMPLICATIONS AND FUTURE RESEARCH

This study explored the characteristics of price (room rate) signaling in an advanced booking environment, and the ramification of the signaling effect on consumer perceptions for revenue management. Specifically the study examined what happens when the price signal is intensified, that is, when the hotel customer faces higher levels of uncertainty, and at the same time, the customers' perceptions about the room rate are magnified by using cues about internal reference prices.

The findings suggest that as hypothesized, the higher the room rate, the higher the customers' quality expectations and their assessment of the prospects of being offered a better (lower) rate in the future. However, the hypothesis regarding the sellout risk expectations was not supported. In fact, it was discovered that when the price signal is intensified, the order is reversed -- the higher the room rate the **lower** the perception about the sellout risk. The practical implications are immediate. Given that it was established in the literature that these perceptions are integral elements in the consumers' advanced booking decision process, it is easy to see how price signaling affect the booking decision and consequently the hotel revenues. On one side higher price signals induce higher propensity to book (and therefore higher revenues) as they induce higher quality perceptions. Previous studies showed that when the signal is of moderate strength, higher prices induce a higher perception of sellout risk and consequently a higher propensity to book and higher revenues. This study demonstrated that when the signal is intensified, the direction is reversed and higher room rates induce lower sellout risk perceptions and therefore they decrease the customers' propensity to book and consequently **diminish** revenues. The implications for revenue management systems and price decision makers are two fold. First, it was demonstrated yet again that price plays a major role in affecting the booking decision beyond the monetary value, as it sends signals that affect several perceptions. These

perceptions shape the consumers' booking decision. Moreover it was demonstrated that the intensity of the signal not only affect the level of impact, but it can also change its direction! These practical insights underscore the importance of understanding the role of price signaling and the need to develop full understanding of the impact on the effectiveness of the hotels' various revenue policies. The theoretical implications were discussed in length in the previous section. It was noted that future research should revisit the previously published models and modify their elements to reflect the unexpected findings of this study. Finally, much more empirical research is called for. A promising venue would be to extend the approach demonstrated here to include multiple levels of room rates (rather than the two price approach in this study) and various levels of signal intensity.

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WEB 2.0 TOOLS EMPOWERING CONSUMER PARTICIPATION IN NEW PRODUCT DEVELOPMENT: FINDINGS AND IMPLICATIONS IN THE TOURISM INDUSTRY

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ABSTRACT

Intense global competition and sophisticated tourism markets have made new product development (NPD) a survive necessity for tourism firms. Nowadays, web 2.0 applications offer numerous opportunities to generate customer intelligence and engage customers more actively in NPD processes for increasing their effectiveness. As research into customer involvement and web 2.0 in NPD is limited, this study aimed to fill in this gap. To achieve this, first, a literature review critically analysed the concept, the benefits and the risks of customer involvement in NPD and then, it explored the ways in which web 2.0 tools enable and support the former. A framework illustrating the usage and impacts of web 2.0 for supporting customer participation in NPD is developed and used for exploring the usage and perceptions of Greek tourism firms about the potential and impact of web 2.0 in NPD. Findings are gathered through focused group discussions with tourism professionals and their implications are discussed.

Key Words: new product development, customer involvement, web 2.0

INTRODUCTION

Global competition is intensified nowadays due to the proliferation of new technologies, accelerated product obsolescence, rapidly changing consumer requirements and flattened global markets. The tourism industry is not an exception from such trends, as technology advances continuously transform both the requirements and the behaviour of global travelers as well as the business models of tourism suppliers. In this vein, the continuous development and introduction of new offerings has become not only a competitive but also a survival necessity of tourism firms. Indeed, new product development (NPD) has been advocated as one of the most important competencies of firms in the current experience and technology based economy (Storey and Easingwood, 1999; Gustafsson et al. 1999; Sigala and Chalkiti, 2007).

The ability to develop new offerings require firms to have flexible NPD processes allowing firms to integrate and co-operate with a wide variety of experts and partners, who in turn provide them access to information and competencies to process this information for generating new knowledge rapidly. Indeed, firms' failure to identify, utilize and create new knowledge leads to the continuous high failure rates of new products (Cooper et al. 1994; Menor et al. 2002), which are mainly attributed to: the lack of an efficient development process (De Bretani, 1991; Drew, 1995; Edgett, 1994); and the lack of a market understanding and orientation (Gronroos, 1994; Martin and Horne, 1995). Specifically, in-depth knowledge and understanding of the customers, their situation, needs and wants have been advocated as one of the major determinants of new product success (Karkainen et al. 2001; Lagrosen, 2001). Customer and market intelligence requires active interaction with the customers, and indeed, several authors have confirmed the benefits of integrating and involving customers into NPD processes (e.g. Gruner and Homberg, 2000; von Hippel, 1976 and 2001; Magnusson et al. 2003). More recently, a new stream of research started demonstrating how new technology applications, such as online toolkits and virtual communities (Dahan and Hauser, 2002; Pitta and Fowler, 2005), can be used in order to identify and engage appropriate users into NPD processes. Nowadays, web 2.0 tools and applications (such as social networks, wikis, social gaming, blogs etc) provide firms with numerous opportunities to enhance their market intelligence and engage customers and their networks into NPD processes (Forrester, 2006). Sigala (2008) explored the use of web 2.0 for understanding customers and developing profitable relationships with them by developing and delivering them with personalised offerings, but she did not go into more depth in order to examine specific ways in which the two major features of web 2.0, namely, customers' generated content and social networks, can be used for supporting and informing NPD processes.

However, the role and the use of customer involvement in NPD is limitedly researched not only in general (Akamavi, 2005), but also through the use of new technologies and particularly nowadays, through web 2.0 applications (Pitta and Fowler, 2005; Sigala, 2008). Moreover, little attention has been given so far to the impact of

customer participation in NPD processes on the success of new product and service design. Examining the impact of customer involvement in NPD is crucially important, as the literature provides divergent results as regards the benefits, risks and problems created by customers' input in NPD processes (Enkel et al. 2005; Leonard and Rayport, 1997; Christensen, 1997). To address these literature gaps, this study aimed at analysing the ways in which web 2.0 tools and applications can be exploited for enabling customers to participate in NPD processes as well as at investigating the benefits, the problems and the risks that this technology enabled and supported customer involvement in NPD may involve. To achieve these, a literature review first critically analyses the concept, the benefits and the risks of customer involvement in NPD and then, it explores the ways in which web 2.0 tools enable and support the former. Based on this analysis, a framework illustrating the usage and impacts of web 2.0 for supporting customer participation in NPD is developed and used for exploring the usage and perceptions of Greek tourism firms about the potential and impact of web 2.0 on involving customers into NPD processes. Primary findings are gathered through focused group discussions with tourism professionals. These findings and their practical and theoretical implications are further discussed.

NEW PRODUCT DEVELOPMENT (NPD) AND CUSTOMER INVOLVEMENT

Customer involvement: a source of market intelligence in NPD

Information has been identified as a necessary resource in NPD processes (Zahay et al. 2004) for reducing uncertainty and risk regarding the market conditions, including customer expectations and needs, and other competitive issues (Carlile, 2001). Indeed, the use of business information and market intelligence for identifying and developing new product ideas in the very early phase of NPD is widely acknowledged (e.g. Flint, 2002; Kohn, 2005). In this vein, previous studies emphasise the need of the firms to consider customers' profiles and needs throughout the whole NPD process, from idea generation and identification of opportunities to product testing and launch (Holt et al., 1984). There are several sources of customer and market information that firms can use (such as suppliers, other business partners, government agencies, industry and trade associations, universities and competitors), however, customers have been recognized as a valuable source for gaining direct and reliable market intelligence (Sigala and Chalkiti, 2007). For example, Pitta et al. (1996) advocated how new product development teams can get more expertise than can be found inside the company by involving and including customers into their processes. Closeness to customers was also ranked by Hanna et al. (1995) as one of the most important factors for new product development success in business markets. Although, understanding customers is usually regarded as being crucial for successful new product development (Lagrosen, 2001), mere understanding and knowledge of customer needs are often not sufficient for successful NPD. In addition, the customer has to be activated, participate and provide valuable feedback in as many NPD stages as possible. Von Hippel (2001) even argued that by using user toolkits for innovation companies can abandon their efforts to identify and understand customers' needs and outsource need-related innovation tasks to their users.

Customer involvement as collaborators in NPD: benefits and risks

The notion of actively involving customers into NPD was initially argued by Von Hippel (1976) who introduced the customer active paradigm (CAP) whereby the customer is active in NPD, as opposed to the manufacturing active paradigm (MAP) in which the manufacturer generates the new product ideas and conducts all problem solving. The key difference lies in the role that the customer plays during the NPD process. The CAP was later extended to an interaction perspective, called the lead user concept (von Hippel, 1988), which suggests that interaction with certain customers (the lead users) can result in new product success. Lead users were defined as the product users who face needs that will be general in a marketplace, but they face them months or years before the bulk of the marketplace, and who benefit significantly by obtaining a solution to those needs. Lead users possess some additional characteristics that differentiate them from ordinary customers and render them as valuable contributors in NPD processes. First, lead users have more experience with product use than others, and this product familiarity may confront them with problems that others have not faced yet. Because of this, lead users can help in identifying and uncovering product improvements (Herstatt and von Hippel, 1992). Lead users also have more interest in a particular product than others, which can fuel advanced exploration and problem solving with the development of different "work-arounds". The latter can significantly help product developing teams for future improvements. Lead users also tend to apply products to their own specific needs, and this extension of product use can be used as a commercial new product idea in the future. Indeed, as lead users can provide detailed product use understanding and they are vocal group of users, Herstatt and von Hippel (1992) found that ideas generated by lead users have enhanced marketplace acceptance. Overall, the lead user concept highlights the impact of customer active

participation and interaction on new product success as well as it underlines the importance of choosing customers with specific attributes for participating and cooperating in NPD processes.

An extensive literature review also provided a plethora of research studies providing evidence of the value of involving the customers in NPD. Magnusson, Matthing and Kristensson (2003) investigated the positive impact of user involvement on NPD outcome in the telecom services. In particular, by comparing findings from professional designers and users themselves, Magnusson et al. (2003) demonstrated that user involvement makes ideas for new products more original and it enhances new products' perceived value by users, while, it can also makes users' ideas less producible on average. Magnusson et al. (2003) also provided a thorough literature review of several other studies (conducted both in the consumer goods as well as industrial goods sector) demonstrating the benefits of including users and customers within all the stages of NPD such as idea generation and screening, beta product adaptations, user examination of mock-ups and prototypes for understanding customer usage and benefits. Lagrosen (2005) investigated customer involvement in NPD by applying a relationship marketing approach, but his focus was on industrial goods and relations. However, product development in industrial goods differs significantly from NPD processes in consumer goods contexts (Hanna et al. 1995; Biemans, 1991) and so, his findings cannot be generalisable. Gruner and Homburg (2000) have also provided evidence that interaction with customers having certain lead users' characteristics (such as technical and innovation knowledge) during specific stages of the NPD process (specifically, the first and the last stages) has a positive impact on new product success. However, their findings are limited and not generalisable, as they also focused on one industrial context (machinery products).

Moreover, in their extensive literature review about customer participation in NPD, Gruner and Homburg (2000) provided some very useful conclusions and directions for future research. Gruner and Homburg (2000) categorised these studies in generalist and specialist studies, the former referring to studies aiming to identify the most important determinant factor on new product success by investigating a broad range of possible determinants, while the latter focusing on in-depth analysis of a limited range of determinants of new product success. Their literature review revealed the need to interact with customers for identifying and meeting their needs during all stages of the NPD process, since all previous studies evidenced and highlighted the positive impact of customer interaction on new product success. Nevertheless, Gruner and Homburg (2000) identified some crucial limitations in past research. First, although customer interaction was identified as a critical determinant of new product success in generalist studies, because of their broad scope, these studies provided very little insight into the type and the role of customer interaction during the different stages of the NPD process. On the other hand, very few specialist studies were found that examined and provided detailed in-depth insight regarding the impact of customer interaction on new product success, while those that were identified provided very descriptive findings as well as measured new product success as a single item. However, as new product success is better conceptualised as a complex construct including the quality of new product, the financial and the qualitative success of the NPD process (Griffin and Page, 1996; Olson et al. 1995), Gruner and Homburg (2000) advocated that the impact of customer involvement on NPD should be examined in all these dimensions of new product success. Several other studies (e.g. von Hippel, 2001; Lagrosen, 2005; Sanberg; 2007) have demonstrated that by integrating consumers in NPD processes, firms can achieve a wide range of benefits related to NPD success, such as: develop products that match and satisfy customers' needs; develop stronger relationships with their customers; gain a better understanding of market needs; reduce errors in the early NPD stages; reduce time to market and speed of NPD process; achieve high new product acceptance rates; and enhance quality of new products.

On the other hand, the literature also provides opposing views regarding user involvement in NPD. These views mainly refer to the limitations of the information that the firm can gain from customers either indirectly (e.g. by conducting market research) or directly (e.g. by involving customers in NPD processes). Analytically, Bennet and Cooper (1981) advocated three reasons for which satisfying consumers' articulated needs will lead to product failures: a) consumers can only perceive what they currently relate to; b) consumers cannot express and verbalise their needs because they do not know what is technologically feasible; and c) expressed consumer needs may change until the new product is developed and launched in the market. Leonard and Rayport (1997) and Christensen (1997) also agreed with the previous by advocating customers' insufficient technical knowledge and inability to express their perceived or latent needs in order to produce breakthrough and disrupting innovations. von Hippel (1986) and Leonard (2002) defined the human tendency to fixate on the way products or services are normally used as functional fixedness and they also recognized that the latter can significantly hinder firms' ability to engage in radical innovations, because users have a tendency to solely improve existing products rather than finding and suggesting a new one. Deszca et al. (1999) emphasized that gaining information about customers and their needs is

more difficult in the case of radical innovations, whereby the firm may not even know who the future potential customers of the new product may be or even if customers are known they may not be able to articulate their needs for a new product. Enkel et al. (2005) summarized the risks of customer integration in NPD as follows: loss of know-how since information is shared; over-dependence on customer views, personality and demands and difficulties in selecting appropriate users; limitation to mere incremental innovation; serving a niche market only if customers involved are not representative of the marketplace. Overall, the literature review highlights the need of future research to in-depth examine the integration and role of customers in every stage of the NPD process as well as critically assess its impact (positive and negative) on the various dimensions of new product success.

Exploiting Web 2.0 applications for customer involvement in NPD processes

One of the major features of web 2.0 is the user-generated content that is created and diffused within customer networks. The identification and use of this content for conducting quick and reliable market research, identifying customers' needs, suggestions for product and process improvements, have been advocated as one of the most critical tasks that firms need to currently conduct for informing their NPD processes (Sigala, 2008). For example, Erat et al. (2006) discussed how the different types of online communities of practice (e.g. B2C, C2C) can be used for acquiring and sharing customer knowledge in order to improve business processes and performance. Pitta and Fowler (2005) also examined the use and benefits of using communities of practice for identifying, accessing lead users and using them in NPD stages such as, idea generation and screening, product – service testing and piloting, product design, delivery preferences and price testing. They specifically argued that lead users participating in online communities not only receive great credibility by their peers, but they also have access to a large-scale distribution method of their opinions and so, they can have a significant potential influence over the buying habits of others. Beyond collecting customer knowledge, online communities can also be used for co-operating with customers (individually or within communities) for designing and testing new products (Rowley et al. 2007; Lagrosen, 2005; Dahan and Hauser, 2002). Meeuwesen and Berends (2007) provided evidence that communities of practice can have a significant impact on NPD team's performance because it allows participants to: identify and communicate with appropriate individuals; remove organisational structure barrier and different time zones; use efficient communication channels; engage in effective knowledge creation and management practices (e.g. storage and easy retrieval of expertise, information etc); enhance learning; and increase trust. One hospitality industry example demonstrating the use of online communities for NPD is the case of Starwood. Starwood Hotels launched 3D designs of its new boutique hotel series 'Aloft' and monitored the response and comment from the SecondLife.com community whom it believed was representative of the new product's target market. Customer feedback on SecondLife was used for adapting the new hotel offering to customer preferences, while technical capable users were also allowed to make hotel offering customizations in the virtual space as well. Second Life is currently a good platform whereby many companies release virtual prototypes of their new offerings at a low cost in order to gain an in-depth understanding of its impact. Overall, web 2.0 applications offer numerous opportunities whereby firms can empower users to participate in product design as well as to test and pilot their new products before launching them in the marketplace. In other words, web 2.0 exploitation presents a cultural shift from product '*designing for customers*' (whereby web 2.0 is solely used for collecting customer intelligence) to '*designing with*' and '*design by*' customers.

Frameworks for studying customer involvement

Alam (2002) developed a holistic framework based on which user involvement in NPD can be examined:

1. *the objective/purpose of involvement*: referring to the reason for which users are involved in NPD such as gaining ideas, reducing cycle time or improve user relations
2. *stages of involvement*: referring to the stage of the NPD process in which users get involved.
3. *intensity of involvement* referring to the degree of user involvement which is described as a continuum from passive listening to extremely intense whereby the user is part of a development team
4. *modes of involvement* referring to the ways in which input and information are obtained from the user such as face-to-face interviews, brainstorming, focus groups etc.

Kaulio (1998) also proposes a framework for studying customer involvement that is based on two dimensions: a) the longitudinal dimension, which includes the points of interaction between customers and the design process and it can be considered as the equivalent of the stages of involvement as referred by Alam (2002); and b) the lateral dimension, which captures the depth of customer involvement in the design process into the following three different categories, which are equivalent of the intensity of involvement according to Alam (2002):

- design for: the products are designed based on customer research but the customer is not further involved;
- design with: an approach which, in addition to the above, also includes displays of different concepts for the customer to react upon; and
- design by: an approach where customers are actively involved and partake in the product design.

As concerns the modes for customer involvement, the use of online communities for NPD, Pitta and Fowler (2005) identified three interaction modes in which firms can adopt for collecting marketing intelligence: convert, overt and mixed modes. In a convert interaction an employee becomes a community member and without disclosing its identity, it asks questions to the community for collecting information and feedback. An overt interaction identifies the firm and the employee(s) interacts with the community as an outsider. The third mode features both modes. For example, the firm's "community member" might uncover some valuable product information and in his interaction he/she might reveal his identity. Later, the firm may use this information to design a new product and then, use the community to verify customers' interest on this. Sandberg (2007) also argued that firms can adopt three different approaches when identifying and using market intelligence for NPD, namely reactive, anticipated or proactive. According to Johannessen et al. (1999), customer-related proactiveness is defined as acting based on the information gathered about the customers before their behaviour has had any direct impact on the firm or as deliberately influencing and creating changes in behavior. On the other hand, firms demonstrate customer – related reactivity when they focus on understanding and satisfying the articulated needs of their customers (Slater and Narver, 1998). For example, when a firm is examining blogs' content for identifying customer needs, it adopts a reactive approach to customer requests, while when a firm takes parts in a blog with the aim to influence a customer needs' requirements by changing their cognitive processes, it then adopts a proactive approach to customers' needs for new products, since it shapes their perceptions and preferences for offerings well in advance before they become aware of any articulated need.

RESEARCH METHODOLOGY

Although several studies argue the importance of involving customers into NPD process, there is limited research investigating the role and real impact of customer involvement in NPD. Moreover, as internet advances and specifically the applications of web 2.0 provide firms with numerous opportunities to integrate customers into their NPD, the urgency for conducting research in this area is high. This paper aimed at investigating the use and impacts of web 2.0 for involving customers in NPD. To achieve that, the paper first reviewed the related literature which provided a holistic framework for studying customer involvement in NPD. The framework was used for exploring the usage and perceptions of Greek tourism firms about the potential and impact of web 2.0 on involving customers into NPD processes. Findings from Greek tourism firms were gathered by conducting focused group discussions with tourism professionals that participated in the e-Business Forum in tourism, as its members represent tourism professionals that are up-to-date with current e-tourism trends and applications. The e-Business Forum in tourism (358 tourism professional members) convenes regularly for brainstorming, drafting and consulting the state with policies and measures aiming to boost e-tourism diffusion in Greece. Access to the forum's gatherings and organization of their agenda discussion items were possible due to the researcher's leading role in this initiative. In specifically, three events and focused groups were organized and held for debating the use and perceptions of tourism professionals regarding the exploitation of web 2.0 for customer involvement in NPD. Each focused-group included around 20 different professionals, it lasted for about two hours and it was moderated by the researcher (who is also one of the co-ordinator of the e-Business Forum in tourism). Alam's (2002) holistic framework on customer involvement was used for identifying themes of discussion and exploration during the focused groups, while based on the work of several authors (e.g. Saren, 1994; review provided by More, 1986; Crawford, 1994, Akamavi, 2005) about the NPD process, professionals' use of web 2.0 for involving customers into NPD was explored in the following NPD stages: idea generation; development; and launching stage. Focused group's data was used for facilitating discussions and analysing respondents' perceptions in the subsequent organised focused groups. Miles & Huberman's (1994) analytical process was used for data analysis: data transcription & identification of major ideas; definition of appropriate unit of analysis; identification & confirmation of categories; identification of themes and potential use of theory for interpretation. In other words, the data analysis is not considered as a discrete phase, but as an ongoing continuous process of data collection and analysis. The second co-ordinator of the e-Business Forum was used for cross checking the reliability of the themes emerging from respondents' perceptions.

ANALYSIS AND DISCUSSION OF THE FINDINGS

Participants in focused groups represent a wide sample of tourism professionals including: 32 professionals working in the hotel sector, 14 professionals working in the travel agent and in the tour operator sector, 9 working in the destination management organizations and one professional working in an airline company.

Stages of customer involvement

All participants claimed that they spent few hours per month in order to read and review customer feedback and comments published in blogs, wikitravel.com, customer review websites, social networks (such as facebook.com) and content networks (e.g. flickr.com) in order to identify: customer preferences, requests and needs; customers complaints and so, ideas for offerings' improvements; competitors' offerings and prices. None participant reported to engage in any proactive approach to customer needs management as nobody claimed to use the web 2.0 for shaping and influencing future customer needs and for setting fashion trends. Consequently, professionals' exploitation of web 2.0 for customer involvement at the first stage of the NPD process reflects a reactive approach to customer needs, as web 2.0 is solely used for scanning the markets and the competitors for identifying and generating ideas for new offerings. Professionals' use of web 2.0 for involving customers in the stage of concept development and concept testing was found to be non existent. Specifically none professional claimed to use any web 2.0 tools for: assessing customers' reaction to prototypes of new offerings; revising and improving specifications of pilot new offerings and/or determining their market attractiveness. The use of web 2.0 tools at the launch stage was also found to be limited, since only two respondents declared to use social networks for market building awareness of their new offerings (specifically of new travel itineraries-tours and hotel packages). Moreover, none professional used web 2.0 for preparing customers for accepting a new product – service, for example by educating customers education on the use of the new product and/or giving customers the opportunity to try the innovation before buying it (trial marketing). Social networks were used for spreading knowledge about new offerings, because they offer several opportunities for diffusing product information through viral marketing practices. In general, professionals' use of web 2.0 for customer involvement in NPD stages was found to represent an exploitative approach to customer communities and their generated content – knowledge rather than a collaborative approach. Professionals exploit web 2.0's generated knowledge in NPD processes for “designing for” customers rather than for “designing with” them and/or creating opportunities so that new products are “designing by” customers themselves.

Intensity of customer involvement

Customer participation in stages of NPD was found to be solely passive. Specifically, all professionals claimed to solely observe and read customers' comments and discussions in web 2.0 rather than engage in different activities aiming to seek a specific customer input and feedback in certain questions and issues. For example, none professional claimed to seek active involvement of online customers (e.g. through brainstorming sessions, e-voting, starting new threads in discussion forums etc) for disclosing, selecting and/or evaluating ideas and prototypes for new products. In other words, professionals viewed and used customers as an item to observe rather than a collaborator in their NPD processes and tasks.

Modes of customer involvement

Modes used for collecting customer information in web 2.0 refer only to direct observation and listening to customers' opinions and discussions. To achieve that, professionals claimed to use both overt and covert approaches meaning that professionals took part in web 2.0 applications by both disclosing as well as not disclosing their professional identity. However, three professionals firmly supported that the most effective way to study customers' preferences online is not to disclose customers their identity, because the latter can significantly bias customers' feedback and comments. In general, professionals did not use the opportunities and tools provided by web 2.0 applications for initiating brain storming sessions, forums and discussion threads in social networks for seeking customers' active and specific input in certain questions and issues.

Objectives and benefits of customer involvement

The major reasons for which professionals used web 2.0 applications for identifying customers' needs and preferences were reported to be: enhance the features of new products in order to satisfy customers' needs; meet competitors' offerings; improve products based on customers' complaints and feedback; and generate ideas of new offerings in a timely and reliable way. In other words, the major objectives for using web 2.0 focused on improving the quality of the new offerings rather than enhancing the financial and quality process of the NPD stages.

Risks of customer involvement

Professionals' concerns regarding the risks that the use of web 2.0 may imply in NPD referred mainly to the quality of customer information and knowledge found on web 2.0. Professionals expressed their worries in terms on whether customer generated content is always true and reliable (or whether web 2.0 content is easily abused by competitors or customers for purposefully harming their and others' business). Concerns were also expressed on whether customers contributing and participating in web 2.0 actually consist a representative sample of their current and future target markets. In this vein, most professionals claimed the need to cross-check web 2.0 customer generated knowledge through several social networks as well as offline existing customers. Few professionals also recognized the fact that since ideas are generated from customers and/or competitors' offerings, such innovation can only be incremental or imitation of existing offerings. Ideas for new products generated from web 2.0 were also perceived not to be able to provide competitive advantage and/or differentiation, since such content is open and transparent to anyone to use for similar purposes.

CONCLUSIONS AND IMPLICATIONS FOR FUTURE RESEARCH

Web 2.0 provides numerous opportunities for generating customer intelligence and involving customers more actively in NPD processes. Findings from this study demonstrated that professionals from the Greek tourism industry make limited use of web 2.0 for customer involvement in NPD. Their use can be described as a reactive approach to customers' preferences and needs, as they eliminate themselves in solely observing and reading customers' comments in web 2.0 applications. Customers are not perceived and used as active collaborators in NPD stages, instead they are passively exploited by using their knowledge generated in web 2.0 applications. Although the sample of professionals used in the focused groups is small and may not be representative of the Greek tourism industry, the findings are disappointing from the perspective that participants represented a sample of professionals well aware and familiar with technology advances and potential applications. In this vein, future research is required in order to investigate the factors inhibiting participants to further exploit web 2.0 in NPD and benefit from more active customer involvement. The replication of the study in a larger scale sample as well as in other contexts and countries can also provide further insight into the ability of tourism professionals to use web 2.0 in NPD and their perceptions about its benefits and risks.

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THE EFFECT OF DEBT MATURITY STRUCTURE ON INTEREST RATE HEDGING AMONG LODGING FIRMS

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ABSTRACT

This study investigates the effect of debt maturity structure on the hedging decision of lodging firms from 2000-2004. The results show a significant effect of debt maturity structure, debt ratings and exposure on the hedging decision. Small unrated firms are more likely to issue short-term debt and swap into fixed rate debt to reduce exposure to interest rate risk. On the other hand, larger and highly rated firms will swap fixed debt into floating rate debt. The results are robust to alternative specifications and also provide support for agency cost and information asymmetry arguments for using interest rate derivatives.

Key Words: derivatives, exposure, hedging, debt maturity, interest rate

INTRODUCTION

The purpose of this study is to investigate the effect of debt maturity structure on interest rate derivative positions in a sample of lodging firms from 2000-2004. Exposure to interest rate risk is costly because it can induce volatility in cash flows and earnings and lower profitability. If volatility is costly, then firms have incentives to manage their exposure to interest rate risk including hedging with financial derivatives. The nature of examining this relation between hedging, debt maturity and exposure might best be understood in an industry specific sample of firms. The lodging industry provides an ideal setting to examine this relation because of its unique characteristics relative to other sectors. These characteristics include seasonality, fixed asset intensity, growth opportunities and financial leverage behavior (Sheel, 1994; Dalbor and Upneja, 2004). For example, Sheel (1994) found significant differences in leverage behavior between lodging and manufacturing firms. His analysis showed earnings volatility to be a significant variable in explaining short-term and long-term leverage variations between lodging and manufacturing firms. More recently, Dalbor and Upneja (2004) document a significant positive relation between growth opportunities and long-term debt, findings that were inconsistent with the general financial literature. This unique relation between growth opportunities and long-term debt relative to other sectors (software industry) has been further affirmed in a recent study by Tang and Jang (2007).

Thus, far, prior lodging and restaurant capital structure studies have focused mainly on investigating the factors that influence the choice of debt structure (Sheel, 1994; Dalbor and Upneja, 2002, 2004). None of the capital structure studies to-date have accounted for the type of debt (fixed versus floating debt), the hedging decision or even controlled for the exposure related to debt. The implications for examining this capital structure issue are important for three reasons. First, firms can alter their debt maturity structure by using financial derivatives such as interest rate swaps. For example, a firm that borrows at floating rates will likely face exposure from rising interest rates that could increase its cash flow and earnings volatility. To mitigate this risk, the firm could easily convert the floating rate debt into long-term fixed rate debt by entering into a variable-to-fixed swap contract. Second, firms should be matching the cash flow exposure from assets with the exposure of their debt liabilities to reduce exposure to interest rate risk as part of their risk management strategy. This means that if firm cash flows are positively (negatively or insignificantly) exposed to interest rates, then firms should borrow at floating (fixed) rates to match their assets with their liabilities. Third, recent evidence from Graham and Rogers (2002) suggest that researchers investigating capital structure decisions must account for hedging or they risk facing omitted variable bias in their findings. Whether lodging firms are engaging in the leverage and risk management behaviors as expected in theory is an empirical question that could yield findings that are different from the mainstream literature. Therefore, an investigation into the debt maturity structure of lodging firms and how it influences hedging decisions will not only extend prior lodging capital structure research but also provide more relevant insights into the unique leverage behavior of lodging firms.

LITERATURE REVIEW

Theoretical and empirical research on capital structure decisions has provided a number of explanations for the motivation to use interest rate swaps to influence the debt maturity structure, including agency costs and information asymmetry theories.

Agency Costs

Wall (1989) provides an explanation for the use of swaps based on the existence of agency costs associated with long-term debt. He argues that management of firms with lower credit ratings may have incentives to increase the risk of the firm at the expense of bondholders. Issuing more long-term debt not only increases the risk of financial distress and potential bankruptcy but also leads to underinvestment. Bondholders recognize this incentive and will demand a higher premium on long-term debt and impose debt covenants to protect their interests so as to avoid a wealth transfer to shareholders. To avoid this agency cost, lower rated firms will therefore issue short-term debt and swap into synthetic fixed rate debt. Hence, interest rate swaps can reduce agency costs by reducing interest rate exposure that is prevalent with debt. Wall and Pringle (1989) provide the empirical support for this explanation.

Information Asymmetry

Arak et al. (1988) rely on the information asymmetry explanation to argue that firms use swaps to exploit inside information about their future prospects. Thus, a firm will issue fixed rate debt when its future credit prospects are good and swap from floating rate debt to fixed rate debt when its future prospects are bleak. Hence, swaps permit management to reduce debt financing costs and exposure to interest rate risk. Titman (1992) develops a model of debt maturity structure to explain why firms use swaps to alter their debt structure. His model suggests that asymmetric information enhances the demand for fixed-for-floating swaps but reduces the demand for floating-for-fixed swaps. Titman (1992) also shows that a firm's best strategy is to use swaps in conjunction with short term financing. By issuing short-term debt and swapping into fixed rate debt, he argues that synthetic fixed rate financing provide firms with the incentives to not only reduce financing costs or default risk but also make productive long-term investments.

Hedging and Debt Structure

A number of empirical studies have also investigated the relation between interest rate derivatives and choice of debt structure. The findings of these studies, while broadly consistent with the theoretical arguments for hedging, have also produced some mixed results. Fenn et al. (1996) find evidence that firms use swaps to hedge interest rate risk arising from their short-term variable debt obligations but find no evidence that they hedge interest rate exposure arising from operating income (assets). In a more recent study, Covitz and Sharpe (2005) analyze the debt structure and interest rate swap positions of non-financial firms in 2000 and 2002. They find that smaller and lower rated (debt ratings) firms face higher interest exposure from their liabilities than larger firms, and consequently, are more likely to use swaps to offset this exposure. On the other hand, larger firms mitigate their interest exposure through long-term debt financing rather than through the use of derivatives. In spite of these mixed findings, none of the above-mentioned studies were industry specific studies that included the lodging industry.

Lodging Capital Structure Research

Related literature in the hospitality industry has focused mainly on the capital structure of lodging firms (Andrew, 1993) and comparing them with firms in other industries (Sheel, 1994; Tang and Jang, 2007) or investigating the factors that are relevant to the debt structure choice (Dalbor and Upneja, 2002, 2004). In one study, Andrew (1993) find an estimated 50% to 65% of the capital structure of lodging firms is comprised of debt, implying that lodging firms are heavy debt users. Upneja and Dalbor (2004) document a significantly positive relation between growth opportunities and long-term debt for lodging firms, indicating that lodging firms are more likely to use long-term debt to finance their growth. This finding is further validated by Tang and Jang (2007) in their comparison of lodging leverage behavior with the software industry. The link between capital structure and derivatives is provided by Stulz (1996). He argues that firms use derivatives to increase financial leverage because of the tax benefits (interest tax shield) of debt financing over equity financing. Consequently, hedging can increase firm debt capacity and move firms towards their optimal capital structure. Empirical evidence of this link is provided by Graham and Rogers (2002) who show that firms' hedge to increase debt capacity and firm value through the interest tax shield.

METHODOLOGY

The purpose of this study is to investigate the effect of debt maturity structure on interest rate derivative positions in a sample of lodging firms from 2000-2004. This section provides a description of the methodology used in measuring the relevant variables in the empirical analysis.

Dependent Variable Measure of Swap Usage

If a firm with existing floating (fixed) rate debt liability is concerned about rising (falling) interest rates it would enter into a floating to fixed (fixed to floating) swap to alter the exposure of its debt from a floating (fixed) rate to a fixed (floating) rate. Because a firm can enter into both types of swaps to alter an existing debt liability, the dependent variable used in this study is the level of a firm's net notional swap position (net swap) which is computed as the amount of a pay floating swap minus a pay fixed swap, scaled by total debt¹¹. This approach has been used in recent empirical studies (Covitz and Sharpe, 2005; Faulkender and Chernenko, 2006). Some firms may also use other interest rate derivatives such as caps to manage exposure. Following Covitz and Sharpe (2005) interest rate caps are treated as pay fixed swaps and the notional amounts of the caps are added to the notional amounts of the pay fixed swaps. The final measure of net swaps (dependent variable) thus determines the percentage of a firm's debt that has been swapped from a fixed (floating) rate to a floating (fixed) rate. This dependent variables ranges in value from -1 (all debt swapped to a floating rate) to 1 (all debt swapped to fixed rate).

Independent Variables: Interest Rate Exposure and Debt Maturity Structure

Based on prior research, several financial variables are included to proxy for interest rate exposure, debt maturity structure, yield spread, debt ratings, and firm size. Interest rate risk exposure from assets is measured by regressing quarterly operating income before depreciation on the average quarterly 6-month LIBOR rate from 2000-2004 (Graham and Rogers, 2002; Fenn et al., 1996; Covitz and Sharpe, 2005) using the following regression:

$$\text{EBITD}_{it}/\text{Assets}_{it} = \alpha_i + \beta_i r_t + \varepsilon_{it} \quad (1)$$

where EBITD is the quarterly income before depreciation, scaled by the book value of assets, α is a constant, β is the beta coefficient that measures the sensitivity of cash flows to interest rates, r_t is the average quarterly 6-month LIBOR rate, and ε is the error term.

The 6-month Libor rate is used in the model because it is the benchmark rate used for most floating rate debt. The estimated beta exposure coefficient for each firm measures the percentage change in operating cash flows against a percentage change in the interest rate. The sign and magnitude of this beta coefficient for each firm thus measures the direction and degree of the firm's interest rate sensitivity. Debt maturity structure is measured as the level of total long-term floating rate debt prior to the effect of swaps and caps. Floating rate long-term debt is computed as the sum of debt in current liabilities (notes payable plus current portion of long term debt) and floating rate long term debt with maturity greater than a year, and scaled by total debt (Covitz and Sharpe, 2005; Faulkender and Chernenko, 2006). The initial floating rate long-term debt is also adjusted for swap use so the final floating rate long-term debt number includes the effects of swaps. For example, if a firm has an existing liability of \$100 million in floating rate-long term debt and it enters into a \$40 million variable to fixed swap, then the final floating rate long-term debt is computed to be \$60 million (and scaled by total debt).

Other Independent Control Variables

The yield spread is employed to control for the interest rate environment, and it is defined as the difference between the 10-year Treasury bond rate and the one-year Treasury bill rate. Thus, if the yield curve is steep (flat), firms are more likely to swap into floating (fixed) rate debt (Faulkender, 2005). A firm's decision to use a swap may also be related to its ability to access the public debt market. A firm's debt rating is measured using the actual S&P categorical debt ratings. Because firms with high debt rating tend to be larger firms and firms with lower ratings are smaller firms, the debt ratings dummy also proxies for firms size.

¹¹ A pay float (fixed) swap is a contract in which the firm pays a floating (fixed) rate and receives a fixed (floating) rate. Notional value is the contract or principal value of the contract that is used to determine the interest payments.

Given the above variable definitions and measurement, a pooled cross-section ordinary least squares (OLS) model is first specified in which net swaps and caps are regressed on the explanatory variables. More specifically, the benchmark empirical model take the following form:

$$\text{Swap}_{it} = b_0 + b_1 \text{Float}_{it} + b_2 \text{Beta}_i + b_3 \text{Yield}_t + b_4 \text{Rating2}_{it} + b_5 \text{Rating3}_{it} + \varepsilon_{it} \quad (2)$$

where Swap is measured as the net percentage of debt swapped to a floating rate; Float is the initial floating rate long-term debt prior to the effect of swaps and/or caps; Beta is measured as the interest rate exposure coefficient from equation 1; Yield is the average spread between the 10-year Treasury bond and 1-year Treasury bond; Rating2 is a dummy variable that is equal to one if the firm has a S&P categorical debt rating of BB and Below (Low Rated); Rating3 is a dummy variable that is equal to one if the firm has a S&P categorical debt rating is BBB and Above (Highly Rated); Unrated firms is the omitted group.

Sample Selection and Sources of Data

The sample for this study was chosen from a list of 84 publicly traded lodging firms in the Standard & Poors' *Compustat* database based on their 4-digit Standard Industrial Classification (SIC) code of 7011 (lodging), 6798 (REITs), and 7990 (gaming). This definition of lodging firms includes lodging REITs and casino firms because lodging comprises a significant component of the business of these firms. This initial list of lodging firms were then cross-checked with the Securities and Exchange Commission's (SEC) *Edgar* database to ensure that each firm had on file a complete set of annual financial reports (10-K) filed with the SEC for the period from 2000 to 2004. The five year period from 2000-2004 is chosen because new reporting requirements for derivatives were implemented in 2001. Firms with less than five years of annual reports were dropped from the sample, primarily because derivatives data is gathered from these reports. Non-publicly traded firms, firms that were in Chapter 11 bankruptcy and firms that were acquired were dropped because of incomplete data. Based on these criteria, from an initial set of 84 firms, 37 firms were dropped from the sample leaving a sample of 47 firms. Excluding 10 firms that did not use interest rate derivatives yielded a final sample of 37 firms (14 gaming, 13 lodging and 10 REITs) with 185 observations over the 5-year sample period. Annual and quarterly financial statement data was obtained from Standard & Poor's *Compustat* database. Interest rate information was obtained from the U.S. Federal Reserve Board (FRB) H.15 Statistical Release. Comprehensive data on derivatives and debt was hand-gathered by reading the debt and market risk disclosures in the 2000-2004 annual 10K filings in the SEC's *Edgar* database.

Table 1
Summary Firm Characteristics (34 swap users & 3 cap users; n=185)

Panel A: Financial Characteristics	Mean	Median	SD	Min	Max
Assets (\$mil)	3,115	1,433	3,461	94	12,660
Sales (\$mil)	1,516	703	1,981	12	10,152
Log of Sales	6.42	6.42	1.41	2.55	9.22
Debt Rating (Numeric)	19	16	6.5	10	28
Debt Rating (Dummy)	0.68	1	0.47	0	1
Yield Spread	1.87	2.38	0.99	0.08	2.77
Long-Term Debt (\$mil)	1,427	631	1,722	50	5,870
Leverage (Long-Term Debt/Assets)	0.50	0.49	0.17	0.10	0.95
Floating Rate Debt (\$million)	481	178	716	0	3408
Floating Debt/Total Debt (%)	0.43	0.36	0.32	0	1
Floating Debt Including Swaps/Caps (\$mil)	482	189	681	0.02	2,906
Floating Debt/Total Debt Incl. Swaps/Caps (%)	0.36	0.32	0.26	0	1
Net Debt Swapped (\$mil)	-21	0	296	-1,495	1,050
Net Debt Swapped/Total Debt (%)	-0.07	0	0.19	-0.75	0.40
Panel B: Swap & Cap Summary					
Fix to Variable Swap (\$mil)	357	300	235	50	1,050
Fix to Variable Swap/Total Debt (%)	0.16	0.10	0.11	0.02	0.41
Variable to Fix Swap (\$mil)	221	100	328	3	1,495
Variable to Fix Swap/Total Debt (%)	0.22	0.19	0.15	0.01	0.75

Interest Rate Caps (\$mil)	249	103	337	25	1,431	
Interest Rate Caps/Total Debt (%)	0.28	0.25	0.23	0.01	1	
Variable to Fix Swaps + Caps (\$mil)	269	104	497	3	2,926	
Variable to Fix Swaps + Caps/Total Debt (%)	0.28	0.22	0.23	0.01	1	
Panel C: Interest Rate Risk from Debt & Assets						
	10th	25th	Mean	Median	75th	90th
Floating Debt/Total Debt	0.04	0.19	0.43	0.36	0.59	0.98
Floating Debt/Assets	0.02	0.09	0.21	0.17	0.29	0.46
Interest Rate Beta	-0.03	0.04	0.16	0.13	0.21	0.32

RESULTS

Descriptive Statistics: Financial Characteristics

Table 1 Panel A presents firm financial characteristics for the 37 lodging firms that used interest rate derivatives. Of the 37 firms that used interest rate swaps and caps at least once during the five year from 2000-2004, the average lodging firm had mean (median) assets of \$3.1 billion (\$1.4 billion) and generated mean (median) sales of \$1.5 billion (\$703 million). Total long-term debt accounted for an average (median) of 50% (49%) of total assets, consistent with prior research that lodging firms are heavy users of debt (Andrew, 1993). Prior to the effect of swaps, long-term floating debt represented an average (median) of 43% (36%) of total debt. Including the effect of interest rate swaps, long-term floating rate debt declined to an average (median) of 36% (32%). The net amount of debt was swapped to a fixed rate and accounted for 7% of total debt.

Descriptive Statistics: Interest Rate Swaps and Caps

Of the 37 firms that used interest rate derivatives, 22 firms used only swaps, 12 firms used both swaps and caps, and 3 firms used only interest rate caps. Table 1 Panel B shows that lodging firms swapped an average notional amount of \$357 million from a fixed rate to a floating rate or 16% of total debt. On the other hand, an average notional amount of \$221 million was swapped from a floating rate to a fixed rate, representing 22% of total debt. Interest rate caps accounted for an average notional amount of \$249 million or 28% of total debt. Including swaps and caps, notional values of interest rate derivatives represented 28% of total debt.

Descriptive Statistics: Interest Rate Risk from Assets and Debt

Turning to the sensitivity of operating earnings to interest rates in Panel C, the interest rate beta estimates show a median positive beta of 0.13 (standard error = 0.014) indicating that on average, lodging firm are positively exposed to interest rates. Thus a one percent increase in interest rates would increase operating return on assets by 13 basis points. This ratio is similar in magnitude to the interest rate risk associated with the median long-term floating rate debt ratio of 0.17. The floating rate debt to assets ratio varies from a low of 0.02 to 0.46 at the 10th and 90th percentiles respectively. In other words, lodging firms face higher exposure from their liabilities than exposure from their operating cash flows and thus have greater incentives to hedge exposure arising from their debt liabilities.

Table 2
Distribution and Tests of Mean Differences for Exposures from Operating Cash Flows and Floating Debt (Floating Debt/Total Debt)

Panel A	Mean Beta Coefficients	F-Value	Post-Hoc (Scheffe's Test)
By Debt Rating			
Unrated	0.21	3.04**	Unrated – Low Unrated – High
Low	0.13		
High	0.14		
Panel B	Floating Debt/Total Debt (Before Effect of Swaps/Caps)	F-Value	Post-Hoc (Scheffe's Test)
By Debt Rating			
Unrated	0.62	19.46***	Unrated – Low Unrated - High
Low	0.33		
High	0.37		

Panel C	Floating Debt/Total Debt (After Effect of Swaps/Caps)	F-Value	Post-Hoc (Scheffe's Test)
By Debt Rating			
Unrated	0.45	7.65***	Unrated – Low
Low	0.30		
High	0.41		

Univariate Analysis

To further explore variations in exposure and debt maturity between firms, a one-way analysis of variance (ANOVA) was performed to test for significant differences in sub-samples. The distribution of exposures and debt maturity were grouped by debt ratings. The results in Table 2 Panel A show that small and unrated firms face significantly greater mean interest exposures from their operating cash flows than firms with low or high debt ratings. These firms are most likely to benefit from the use of swaps and caps to reduce the volatility of their earnings and cash flows. Prior to the effects of swaps and caps on the debt maturity structure, the results in Panel B show a significantly higher proportion of floating rate debt for small and unrated firms. Unrated firms thus face greater exposure from interest rate risk arising from their debt liabilities than larger rated firms. Including the effects of swaps and caps in Panel C shows a substantial reduction in floating debt for small unrated firms. While small and unrated firms will be more likely to use variable to fix swaps to fix the exposure from a floating rate to a fixed rate, in contrast, large and highly rated firms use fixed to floating swaps and caps to increase their proportion of floating rate debt.

Table 3
Effects of Derivatives and Exposure on Debt Maturity Structure

Variable	Prediction	Model 1	Model 2	Model 3	Model 4
Constant	+/-	.014 (0.31)	-.009 (-0.22)	0.123 (1.43)	0.042 (0.40)
Float	-	-.298 (-5.02)***	-.273 (-5.10)***	-0.439 (-3.94)***	-0.340 (-2.69)***
Rating 2 (BB & Below)	+	.035 (0.95)	.050 (1.37)	-0.005 (-0.12)	0.033 (0.64)
Rating3 (BBB & Above)	+	.132 (3.46)***	.117 (2.53)***	0.100 (2.22)**	0.100 (1.33)*
Yield	+	.020 (1.61)*	.021 (1.95)**	0.008 (0.60)	0.016 (1.17)
Beta	+/-	-.164 (-2.24)**	-.162 (-2.14)**	-0.167 (-3.24)***	-0.162 (-1.68)*
Obv.		185	185	185	185
R ²		0.400	0.397	0.359	0.396
F Ratio		11.12***		19.00***	
Wald chi ²			53.71***		49.60***
Hausman chi ²			1.37	3.23*	2.36
Breusch Pagan LM chi ²			54.55***		
Hansen J statistic				3.187	1.967

Note: This table presents the results of multiple regressions for 37 sample firms (185 firm-year observations) over the 2000-2004 period. Model 1 is a pooled OLS cross-sectional regression. Model 2 is a panel data random effects model. Model 3 is an instrumental variable OLS regression. Model 4 is a panel data random effects instrumental variables regression. All regressions are estimated using firms that report outstanding interest rate swaps and caps at the end of a fiscal year. The dependent variable is the net percentage of debt swapped to a floating rate and computed as fixed-to-variable swaps and caps minus variable-to-fixed swaps and scaled by total debt of the firm. Float is the initial floating rate debt (debt due within one year + floating rate debt) before accounting for the effects of interest rate swaps and scaled by total debt during the fiscal year. In Model 3, Float is the predicted value from the first stage regression and instrumented by the book-to-market ratio (book value of equity/market value of equity), collateral value of assets (net property, plant and equipment/total assets), firm size (log of total assets), exposure (dummy variable equal to 1 if firm is significantly exposed to interest rates, otherwise it is zero), and profitability (operating

income before depreciation/net sales). Rating2 (BB & Below) is a debt rating dummy variable that is equal to one if the firm has low or below investment grade ratings and zero otherwise. Rating3 (BBB and Above) is a debt rating dummy variable that is equal to one if the firm has high or investment grade ratings and zero otherwise with unrated firms comprising the omitted group. Yield is the average spread between the 10-year Treasury bond and the 1-year Treasury bond during the fiscal year. Beta is the interest rate exposure coefficient obtained from a regression of quarterly operating income before depreciation (scaled by assets) on the average quarterly 6-month LIBOR rates from equation 1. All t-stats in parentheses are computed using robust standard errors to mitigate heteroskedasticity. ***, **, * represents significance at the 1%, 5% and 10% levels respectively.

Multivariate Analysis

The effect of debt maturity on the hedging decision is tested by regressing the proportion of debt swapped to a floating rate on each firm's interest rate exposure, debt maturity and other control variables. The regressions were estimated with robust White standard errors to mitigate the presence of heteroskedasticity. Multicollinearity was also tested and found to be within conventional limits ($VIF < 3$ in all regressions). Model 1 of Table 3 shows the results of the benchmark pooled cross-sectional regression. Debt maturity structure (long-term floating rate debt prior to the effect of swaps and caps) is significantly and negatively related to the percentage of debt swapped to a floating rate. The coefficients of -0.30 implies that on average, firms offset more than a quarter of the floating rate debt exposure arising from their liabilities through swaps and caps. Thus, one can conclude that lodging firms use interest rate swaps and caps to hedge the interest rate risk arising mainly from their short-term debt obligations. This is consistent with the theories that consider debt maturity structure in the decision to use a swap (Wall, 1989; Titman, 1992). Such hedging accounts for approximately 40% (r-sq) of the cross-sectional variation in swap and cap positions. On average lodging firms increased the proportion of fixed (floating) rate debt in their debt structure by entering into floating-to-fixed swaps. The findings also indicate that large firms with rated debt are significantly more likely to issue fixed rate debt and swap into floating rate debt while unrated firms will issue floating rate debt and swap into fixed rate debt. The coefficient on the yield spread is marginally and positively significant, implying that for a one percent increase in the yield spread, an additional two percent of the average firm year's debt is swapped to floating. This is consistent with the interest rate spread having some power in determining the firm's debt maturity. In other words, if the yield spread increases (decreases), firms are more likely to take on floating (fixed) debt. The exposure coefficient is significantly and negatively related to the net floating swap position. These coefficients imply that on average, lodging firms eliminated an estimated 17% of asset exposure arising from their operating cash flows by entering into floating to fixed swaps. In other words, firms are hedging to match the exposure of their assets with the exposure of their debt. To verify this finding, I replace the beta coefficient with a dummy variable that is equal to one if the beta coefficient is significant at the 10% level and zero otherwise. The evidence indicates that the dummy coefficient is significant at the 5% level providing additional support for the main finding. These findings are also different from prior studies in which researchers have failed to document a significant relation between operating cash flows and hedging (Faulkender, 2005; Covitz and Sharpe, 2005; Fenn et al., 1996).

Alternative Specifications to Test of Robustness of Results

Pooled OLS will produce biased and inconsistent estimators if unobserved factors are correlated with the explanatory variables, resulting in omitted variable bias caused by omitting a time-constant variable (Wooldridge, 2000). To mitigate this bias, a firm fixed-effects and random effects model are tested as alternative specifications to the pooled OLS cross-sectional regression. The insignificant Hausman test in Table 3 ($\chi^2 = 1.54$) favors the random effects model while the significant Breusch Pagan LM test statistic ($\chi^2 = 54.55$) favors the random effects model over the pooled OLS results. The regression findings from the random effects model, although similar to the pooled OLS regression, show stronger results for the yield spread.

Graham and Rogers (2002) find evidence of a previously undocumented link between hedging and capital structure. Their finding not only show the decisions to be jointly determined but also imply that lodging capital structure studies that failed to account for the hedging decision may suffer from omitted variable bias. To mitigate potential endogeneity of the debt structure choice with respect to hedging, an instrumental variable (IV) OLS regression is employed as a third specification (Table 3 Model 3). Long-term floating rate debt is treated as endogenous and instrumented with financial variables similar to those from prior lodging capital structure studies (Sheel, 1994; Dalbor and Upneja, 2004; Tang and Jang, 2007). These variables include book-to-market ratio (measure of growth opportunities), collateral value of assets (net property, plant and equipment/total assets), firms size (log of total assets), exposure (dummy variable equal to one if exposure coefficient is significant, otherwise

zero), and profitability (operating income before depreciation/net sales). The weak Hausman test statistic ($\chi^2 = 3.23$) cannot be rejected at the 10% level, implying that the debt maturity variable may potentially be endogenous. The insignificant Hansen J statistic (3.187) indicates that the instruments used are exogenous and correctly excluded from the estimated regression. More importantly, the coefficients on debt maturity, debt ratings for large firms and exposure again confirm the main findings that debt maturity and exposure have a significant effect on interest rate hedging. A Hausman specification test to compare the OLS (Model 1) and IV (Model 3) estimates (under the null of no endogeneity) finds the IV estimates to be consistent ($\chi^2 = 20.23$, $p\text{-value} = 0.001$). However, when a random effects IV regression model is employed (Model 4), the insignificant Hausman test results show no evidence of endogeneity ($\chi^2 = 2.36$). Although Model 4 results are significantly weaker for exposure and debt ratings, the coefficient for floating debt is still significant. Finally, another Hausman test is used to compare the random effects estimates of the IV regression (Model 4) with those of Model 2. The insignificant test results ($\chi^2 = 1.15$, $p=0.949$) again favor the findings of the random effects regression of Model 2 due to the inconclusive evidence on endogeneity.

SUMMARY

The purpose of this study was to investigate the effect of debt maturity structure on interest rate derivative positions for a sample of lodging firms, gaming firms, and lodging REITs. The results show that debt maturity structure, debt ratings and exposure significantly influence the interest rate hedging decision. Since lodging firms are positively exposed to interest rate risk, interest rate derivatives such as interest rate swaps and caps are used in conjunction with debt maturity structure to mitigate interest rate exposure and to lower borrowing costs. Lodging firms face greater exposure from their debt liabilities compared to exposure from their operating cash flows and thus hedge mainly from their debt liabilities. Smaller unrated lodging firms that are more reliant on short-term floating rate bank loans will find long-term fixed debt to be costly and therefore employ interest rate swaps and caps to reduce their exposure to interest rate risk. By issuing floating debt and swapping into fixed rate debt, smaller unrated firms will realize benefits from lower financing costs, lower costs of financial distress, and lower interest rate exposure. On the other hand, firms with high debt ratings are more likely to issue fixed rate debt and swap into floating rate debt. These empirical findings also provide support for the agency cost and information asymmetry theoretical arguments for swap and cap use. In addition, the results support the conclusion that the yield spread has a positive and significant effect on swap usage. The observed significantly negative relation between interest rate exposure and swap usage also indicates that lodging firms hedged some interest rate exposure arising from their operating cash flows. This new and significant finding on the association between interest rate exposure and swap usage differs from prior research and thus provides a new and valuable contribution to the existing literature on the association between derivatives and exposure.

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INFLUENCE OF PUSH AND PULL MOTIVATIONS ON SATISFACTION AND BEHAVIORAL INTENTIONS WITHIN A CULINARY TOURISM EVENT

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ABSTRACT

The study constructs a causal model of culinary tourist behavior from the theoretical framework of push and pull motivations. The study proposed that culinary event attendees' expenditures, word-of-mouth behavior, and repeat patronage intentions would be affected by their overall event satisfaction. Push and pull motivations subsequently were examined for effect on overall satisfaction. Using multiple regression analysis with data collected from an international culinary event the study examined the above relationship. Results of the analysis can be summarized as: 1) food event, event novelty, and socialization were push motivations identified for attending a culinary event, 2) food product, support services, and essential services were pull motivations and had a significant predictive affect on overall satisfaction, 3) overall satisfaction had a significant relationship with outcome variables. It is believed that results of the present study will be useful to organizers of culinary events and/or destination managers.

Key Words: culinary tourism, motivations, satisfaction, event marketing

INTRODUCTION

A 2007 report from the Travel Industry Association of America estimated that 17% of leisure travelers (27 million individuals) engage in some form of culinary activity while traveling (TIA, 2007). A few years ago food events may not have been considered a reason to travel, but with the growing popularity of the Food Network and the Star-chef phenomenon, such events are being recognized as attractions in and of themselves (Peers, 2006). Culinary activities include a broad spectrum of food-related activities developed for visitors to enjoy, such as restaurant dining, food festivals, factory tours, farmer's markets, educational seminars, and farm visits. Fields (2002) revealed that the understanding of consumer behavior concerning food in tourism requires empirical evidence relating to socio-economic backgrounds of tourists, and their motivations. This research contributes to the existing body of research on culinary tourism by examining the motivations for attending a food event and identifying items perceived as important to the tourists while making travel decisions.

BACKGROUND

Dann's (1977) push-pull theoretical framework was used as a guide for assessing travel motivations of individuals attending a culinary event. According to Dann (1977) "push" factors are the factors that influence him/her to travel to any destination and "pull" factors are those factors that attract a tourist to a particular destination. Push motivations involve relaxation, family togetherness, knowledge, prestige, and/or socialization (Formica & Uysal, 1996), whereas pull motivations may be representative of culture (e.g., education and novelty). Dann (1977) proposed that chronologically, push factors precede pull factors in the travel decision-making process. Thus, the need to take a vacation precedes the decision-making process of where to go.

Motivations are measured in order to identify and segment types of tourists for the purpose of product development and market promotion. According to Murray (1964), "a motive is an internal factor that arouses, directs, and integrates a person's behavior" (cited in Iso-Ahola, 1982, p. 258). Gnoth (1997) postulated that internal motives

represent the needs that all humans experience, whereas external motivators indicate the presence of specific situations with which these needs arise. Crompton and McKay (1997) gave three main reasons for better understanding motivation, as follows: it is key tool for designing offerings for customers, it is a direct link to customer satisfaction, and it is a crucial element in understanding a customer's decision making process.

Yoon and Uysal (2005) explored the causal relationship of motivations, satisfaction, and destination loyalty utilizing the constructs of push-pull theory. The researchers explored the notion that external sources of motivations may have more affect on satisfaction than do internal sources. External sources of motivation were represented by destination attributes (pull) and internal sources were those psychological forces or motivations (push). Yoon and Uysal's (2005) proposed a hypothetical model, whereby motivations influence a tourist's satisfaction with a travel experience, which then affects destination loyalty.

A review of literature on push and pull motivations indicates these factors are the driving forces behind tourism decision making behavior; however, no single theory has been decided upon. Researchers have pointed out the fallacy of assuming only one motive drives the consumer decision-making process, therefore, a more comprehensive approach to understanding motivations is needed (Fields, 2002; Gyimothy, 1999; Yoon & Uysal, 2005). Determining what activities individuals seek to satisfy needs and identifying these individuals as a homogenous group is the essence of market segmentation and one of the objectives of this research.

Historically, hospitality services (e.g., food, beverage and accommodations) have served a supporting role within the larger tourism industry and were considered a necessary component of the product mix, but not a strong enough attraction in itself to motivate tourists to travel (Gunn, 1993). Godfrey and Clarke (2000) categorized a destination's resources as either a principal resource or a supporting resource. Principal resources were those with the strongest pulling power, motivating a tourist to travel. On the other hand, supporting resources are those that supplement a destination's appeal, but do not motivate an individual to travel. More recently, food is being considered a principal resource, attracting individuals to travel and visit a destination specifically for the unique food products offered.

While investigating food as part of the tourist experience, Quan and Wang (2004) developed a typology of food consumption. On vacation, food may be consumed as: (1) a peak experience (main attraction), (2) secondary or supporting experience, or (3) an extension of the daily routine. According to the authors, awareness of the importance of food as a primary tourist activity implies greater opportunities for development of destination attractions, such as local themes for agro-tourism development, cultural tourism events, food as a sub-event within a mega-event, food festivals for destination identity, and food events as a source of sustainable tourism.

As with other forms of tourism, such as ecotourism, heritage tourism, and adventure tourism, a variety of definitions for special event tourism are prevalent. According to Getz (1991), a special event is "a one time or infrequently occurring event outside the normal program or activities of the sponsoring or organizing body. To the individual, a special event is an opportunity for leisure, social, or cultural experience outside the normal range of choices or beyond everyday experience" (p.44).

Researchers point out that festivals and special events are unique tourist attractions and frequently are difficult to compare (Baum, 1999), consequentially, when evaluating festivals and special events, specific sets of criteria must be utilized. According to Nicholson and Pearce (1999), event attendees do not appear to be a homogenous group; on the contrary, different events attract different types of tourists. Festivals and special events may have varying goals (e.g., branding, culture, heritage), but one underlying goal of most festivals is the economic stimulus the event will have on the community or destination (Uysal & Gitelson, 1994).

Customer satisfaction is a critical indicator of a destination's performance. Satisfaction has been suggested to lead to customer loyalty (Yoon & Uysal, 2005), which is frequently represented in terms of expenditures, repeat attendance, and positive word-of-mouth (WOM) behavior (Oliver & Burke, 1999). Therefore, knowledge of determinants that affect outcome variables (expenditure, repeat patronage and WOM behavior) would seem important for destination marketers developing products which will satisfy visitors. However, little research has been conducted measuring the relationship of customer satisfaction with outcome variables within the context of culinary tourism.

Given the absence of research concerning motivations for individuals to attend a culinary event, the overall objective of this research was to examine the “push” and “pull” motives of individuals attending a culinary event. In addition, this research analyzed the effect of push and pull motivations on satisfaction and outcome variables at the Memphis in May World Championship Barbecue Cooking Contest (WCBCC). The WCBCC was selected for the current research study because of its popularity, regional representation as a food event, and cultural influences.

METHODOLOGY

The primary purpose of this research was to examine the effect of push and pull motivations on satisfaction, expenditures, WOM recommendations, and repeat patronage at a culinary event. Specific objectives include:

Objective 1: To identify the push and pull motivations to attend a culinary event.

Objective 2: To determine the effect of push and performance on overall satisfaction.

Objective 3: To determine relationships among motivations, performance, satisfaction, and outcome variables: expenditure, WOM recommendations, and repeat patronage of visitors to a culinary event.

Study Context

The culinary event under study was WCBCC held annually in the city of Memphis, TN. The barbecue-cooking contest is one of four events happening during the month-long celebration. The barbecue-cooking contest is a 3-day event, beginning on Thursday morning and ending Saturday evening, which involves competitors, spectators, and judges. There are three main opportunities for spectators to become actively involved in the competition: 1) a tasting tent, where the spectator purchases a ticket to act as a judge by tasting and comparing five styles of barbecue, 2) a guided tour of the competing teams, gaining insight on grilling secrets and learning first-hand of the teams' passion for barbecue, and 3) on their own, walking around and interacting with the competitors. Because the barbecue competition is a three-day event, local health codes prohibit teams from selling or giving away their barbecue to the general public.

Information concerning primary motivations, socio-demographics, and travel behavior information was collected on Part I of the survey from visitors while attending the 2006 WCBCC. Questionnaires were distributed using a systematic, randomized sampling methodology. Human Subjects approval was obtained prior to conducting research. Types of questions referred to general travel motivations, perceived importance of specific culinary event attributes, demographics, and use of information sources. In addition, participants were offered a \$2 bill, as an incentive to participate in Part I of the study.

Part II of the survey involved collecting information on perceived performance of event attributes specific to the barbecue competition, overall satisfaction, expenditure data, word-of-mouth recommendations, and repeat patronage behavior. This information was collected using a combination of mail-back, self-administered questionnaires or online surveys in order to collect the most complete data and total amount of money spent during the visit. Utilizing mailing information or email addresses collected from survey part I, survey part II was sent out immediately following the event. Utilizing a modified Dillman (2000) method, postcard thank you reminders were sent out one week following initial distribution. One additional reminder was mailed 2 weeks after original questionnaire distribution to encourage anyone who had not completed the survey to do so. Five \$100 gift certificates were offered with the second part of data collection to increase response rate.

Research Design and Data Collection

Applying a systematic approach, a convenient random sample ($n = 1,600$) was drawn from visitors to the WCBCC. Site analysis was conducted with festival organizers, prior to the research starting, regarding traffic flow and activity scheduling for the purpose of including a wide range of festival venues. The sampling plan required that a questionnaire be distributed to every 10th adult (18 years or older). Participants then were asked to complete a short survey. Each survey was coded with a number and day to track data for the follow-up survey. Surveys were distributed equally throughout the three-day event to ensure a representative sample of visitors.

A total of 1,600 questionnaires were collected over the three-day event. However, 155 of the questionnaires were discarded because they were incomplete or appeared to be answered discrepantly for a total of 1,445 useable surveys. Based on the researcher's observation, approximately one in every ten individuals who were approached declined to participate in the study.

Research design involved the development of an original instrument based on previous research, expert opinion, and pilot test results. The main variables in the study included “push” and “pull” motives of culinary events, overall satisfaction, and outcome variables: expenditures, word-of-mouth recommendation, and repeat patronage intention. Dependent variables were customer satisfaction, expenditures, word-of-mouth recommendation, and repeat patronage intention. Independent variables were push and pull motive items.

In an effort to enhance face and content validity, the original push (35 items) and pull (52 items) motive item list was distributed to independent panels of experts. Based on established decision rules, the panel of experts reduced the original list of push items to a list of 26 and the pull items to a list of 27 items.

A pilot test of the push and pull travel motivation items was conducted on a convenient sample of individuals ($n = 51$) attending the National Barbecue Association annual meeting in Knoxville TN. Responses from the convenient sample were used to pre-test the dimensionality and internal reliability of both push ($\alpha = 0.89$) and pull travel ($\alpha = 0.88$) motivation items.

Descriptive statistics including frequencies, percentages, and Chi-square tests were used to describe the sample and determine if differences existed in terms of demographic characteristics: age, education, income, and travel behavior. Individuals were segmented initially based on motivations. The objectives were tested using factor analysis and multiple regression analyses. The resulting factors were regressed on overall satisfaction to determine the predictive effect of push and pull motivations at a culinary event.

RESULTS AND DISCUSSION

The demographic characteristics of the respondents indicated that there were slightly more males (52%) than females (48%) interviewed, and the majority of the respondents were between the ages of 18 – 45 (55%), with 31% between the ages of 46 – 59 (Smith & Costello, 2008). A little more than half of the respondents had annual household incomes of \$50,001 or more, and the income category of \$100,000 or more had the largest percentage of respondents (18%) compared to the other income categories. In terms of education, 36% had completed high school, 18% had an associates degree, 28% had bachelors degree, and 18% had graduate degrees for a total of 64% who had some college education or higher.

As for travel behavior characteristics of the sample, the majority (69%) of respondents had traveled 50 miles or more one-way and therefore were considered tourists to the culinary event (www.state.tn.us). In terms of primary reason to attend the event, just over half (52%) selected to “see and taste the barbecue,” whereas 22% were there “to enjoy the entertainment,” 11% “to watch friend/family compete,” 7% for “business,” and 8% had more than one primary reason to attend. About 45% of respondents traveled in parties of two adults, while approximately 18% traveled alone. The vast majority (87%) of respondents did not travel with children. As for length of stay in the Memphis area, 32% of respondents stayed for one day and these individuals most likely represented the local contingency or those individuals traveling less than 50 miles. However, 20% of the respondents stayed for 2 days, 21% stayed for three days, and another 21% stayed between four and six days. Surprisingly, 68% of respondents were attending the culinary event for the first time (Smith & Costello, 2008).

The first research objective was to identify the push and pull motivations to attend a culinary event. First, exploratory factor analysis was performed to estimate the number of underlying push motivation dimensions. There were 26 items measuring the various push travel motivations. The Kaiser-Meyer-Olkin measure of sampling adequacy (0.96) confirmed that factor analysis could be applied appropriately. A principle component factor analysis with varimax rotation subsequently was used to delineate the underlying dimensions of the culinary event motivations. Items with factor loadings of 0.399 were suppressed from the analysis and any item loading within 0.05 on more than one factor was removed from the factor analytic part of the analysis. Three factors emerged with Eigenvalues greater than 1.0 and a scree plot confirmed this number. The factors accounted for 58.7% of the variance in the original variables. The three factors represented the underlying constructs: (1) *Food Event* (eigenvalue = 11.51, variance explained = 23.1%, $\alpha = 0.92$), (2) *Event Novelty* (eigenvalue = 1.37, variance explained = 21.9%, $\alpha = 0.91$), and (3) *Socialization* (eigenvalue = 1.21, variance explained = 13.8%, $\alpha = 0.80$). Labeling factors were based on the individual items under each factor grouping and judgmental criteria consistent with the literature. A detailed table can be found in previously reported research (Smith & Costello, 2008).

Second, to fulfill objective one, pull motivations for attending a culinary event were analyzed. The 27 pull items measuring performance satisfaction were factor analyzed to disclose underlying constructs. Exploratory factor analysis was performed first, to estimate the number of underlying motivation dimensions. The Kaiser-Meyer-Olkin measure of sampling adequacy (0.96) confirmed that factor analysis could be applied appropriately. A principle component factor analysis with varimax rotation then was used to delineate the underlying dimensions of the performance of culinary event pull motivations.

Three factors emerged with Eigenvalues greater than 1.0 and a scree plot confirmed this number. The factors accounted for 62.23% of the variance (Table 1). The three dimensions were labeled as: (1) *Food Product* (eigenvalue = 13.94, variance explained = 25.7%, $\alpha = 0.95$), (2) *Support Services* (eigenvalue = 1.69, variance explained = 20.1%, $\alpha = 0.90$), and (3) *Essential Services* (eigenvalue = 1.17, variance explained = 16.3%, $\alpha = 0.87$). Labeling factors were based on the appropriateness of the individual items under each factor grouping and the Kotler, Bowen, and Maken's (2005) product level concept. This concept suggests that hospitality managers should consider consumer products under four levels: core product, facilitating products, supporting products, and augmented product.

The performance factor explaining the highest percentage of total variance (25.7%) was "Food Product." This factor consisted of ten items, such as cooking equipment demonstrations, celebrity chef demos, and cooking techniques (refer to Table 1 for a complete list). This factor represents the primary attributes for how individuals assess their satisfaction with the WCBC. The items in this factor depict the core product of a culinary event and are examples of the benefits gained from attending the event.

The second factor, "Support Services," explained 20.1% of the variance and included ten items (Table 1). This factor represents a combination of supporting products and augmented products. According to Kotler et al. (2005), supporting products are additional products that add value to the core product and can give a competitive advantage, while augmented products combine what is offered with how it is delivered. Examples of the supporting product services are good local restaurants, nightlife, cultural attractions, and festival souvenirs, whereas, the augmented product involves friendly service, attractive environment, pleasant smells, good highways, opening/closing times, and convenient parking. Support services represent an opportunity for the organizers to exceed the visitor's expectations, thus, gaining an advantage over other culinary events.

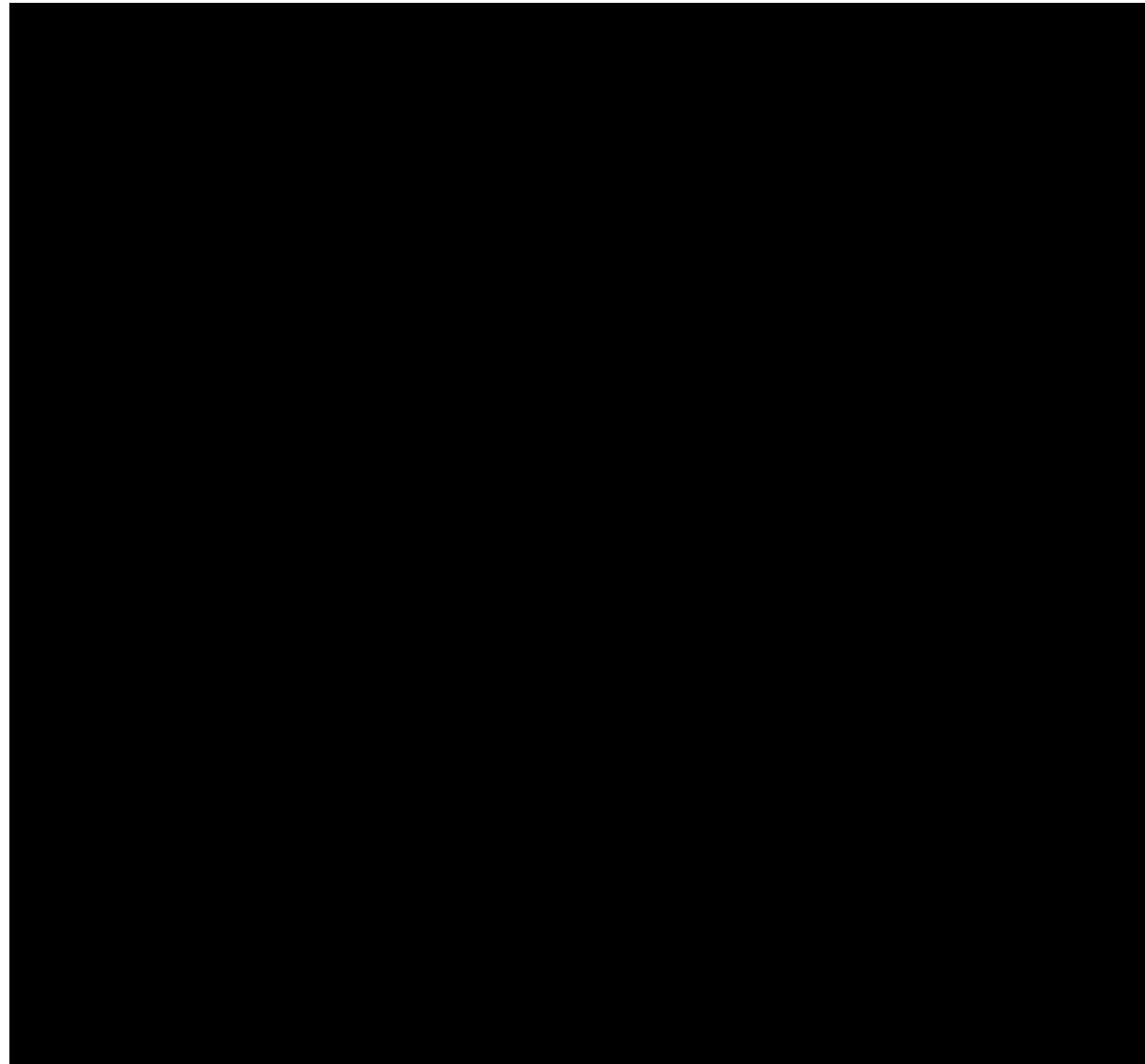
The third factor was termed "Essential Services," and explained 16.3% of the variance. Seven items included on this factor were: come and go as you please, food and beverage prices, outdoor activities, cleanliness of event, free food tasting, music/entertainment, and program guide. This factor represents basic service functions and facility considerations at any given special event; items that need to be present in order for the guest to make use of the core product. Essential services are not considered benefits themselves, however, their absence will cause visitor dissatisfaction.

Multiple regression analysis was performed to measure the effect of the three performance factors (food product, support services, and essential services) on overall satisfaction. The mean score for the computed "overall satisfaction" was 3.58 on a scale from 1 to 5.

The multiple regression analysis model was significant and explained 61% of the variance ($F = 144.137$, $p < 0.001$, Adjusted R square = .609). Standardized beta coefficients for food product was 0.55, meaning for every one point increase in satisfaction with the core product of food, overall satisfaction increased just over half a point ($t = 14.671$, $p < 0.001$). Standardized beta coefficients for supporting services was 0.27, translating for every one point satisfaction increased with the supporting services factor, overall satisfaction increased just over a quarter point ($t = 7.14$, $p < 0.001$). Lastly, standardized beta coefficients for essential services was 0.49, indicating for every one point satisfaction increased with the essential services, overall satisfaction would increase almost a half of a point ($t = 12.88$, $p < 0.001$). All three performance factors had significant effects on overall satisfaction; food product having the greatest effect followed by essential services and supporting services.

An additional multiple regression analysis was performed to examine effects of push motivations on overall satisfaction. Results revealed no significant effects. Performance only had a significant effect on overall satisfaction. These findings support the research of Dabholkar, Shepherd, and Thorpe (2000) whereby performance measures

were found superior for measuring service quality and satisfaction as compared to a measure of expectation versus disconfirmation approach.



The final objective was to assess the overall fit of the proposed culinary event model by analyzing the relationships among motivations, performance, overall satisfaction, and outcome variables: expenditures, word-of-mouth recommendations, and repeat patronage of visitors to a culinary event. Pearson's product-moment correlation was used to determine the strength of the relationships among these variables.

Figure 2 represents the results of testing the proposed culinary event model. The push motivations of *food event* and *event novelty* were found to have no relationship with overall satisfaction. The only push factor that had a significant correlation (0.177) with overall satisfaction was *socialization*. The r-square value was 0.03 or 3% of the variation explained by this relationship. *Socialization* was comprised of items relating to having been before, enjoying activities with friends and companions, and activities that offer thrills. Overall, these findings indicate a non-significant relationship between push motivations and overall satisfaction. Contrarily, all three of the pull performance factors had a significant correlation with overall satisfaction at the $p < 0.01$ level. These findings are important for culinary events, in that three performance factors (i.e., *food product*, *essential services*, and *support services*, respectively) were found to have significant relationships with overall satisfaction.

The *food product* factor ($r = 0.552$), represented the core reason individuals attended the WCBCC. Results from the regression analysis support these findings. Fifty-two percent of the sample indicated *to see and taste the food* was their primary motivation for attending the culinary event. Attribute items within this factor related to food information, food education and food knowledge. This factor represents an immersion in the food experience and these are the needs which organizers must address in order to satisfy culinary event visitors. These results contradict the findings of Yoon and Uysal (2005), where pull importance factors were found to have a significant negative effect on satisfaction.

The relationships of overall satisfaction to outcome variables: expenditures, WOM recommendations, and repeat patronage were significant with the three outcome variables at the $p < 0.05$, $p < 0.01$ level, three variables but only two p-values, “respectively.” This information is important for the organizers of the WCBCC because maximizing event satisfaction is crucial for influencing post purchase behavior. As satisfaction increases so does positive WOM and repeat patronage behavior. Likewise, this relationship is positive, as satisfaction increases so does WOM and repeat patronage behavior. These findings support previous research (Dabholkar et al., 2000; Yoon & Uysal, 2005) suggesting customer satisfaction has a strong effect on outcome variables or behavioral intentions.

Repeat purchasing and recommendations to other people most often are referred to as consumer loyalty in the marketing literature. WOM advertising is classified as informal personal selling and noted in the research literature as the main source of information from which event attendees learn about an upcoming event. Similarly, repeat patronage offers reduced marketing costs, as well as higher earning potential as a result of lower attrition by loyal customers. In addition, expenditures are an outcome variable resulting from most consumer behavior exchanges. Consumer loyalty and satisfaction constructs have been inextricably linked within the marketing literature, however, not unconditionally bound (Oliver, 1999). It can be intuitively assumed that if visitors are satisfied with their experiences, they are willing to revisit and recommend them to others. This study provides empirical evidence supporting this statement, in that overall satisfaction was found to directly affect outcome variables (i.e., consumer loyalty). Thus, information concerning culinary tourists’ loyalty is important to event marketers and managers while attempting to retain their valuable customer base in a competitive market.

The findings of testing the proposed culinary event model have implications for the success of culinary event organizations. In order to improve overall satisfaction with the culinary event experience, organizers must consider the satisfaction with the pull performance motivations, which are related to the food product and essential services. Additionally, event organizers should be aware of the relationship satisfaction has with outcome variables. Lastly, push motivations are found to be a useful segmenting tool, however, only the motivational factor *socialization* had a slight, yet weak relationship with overall satisfaction.

CONCLUSIONS

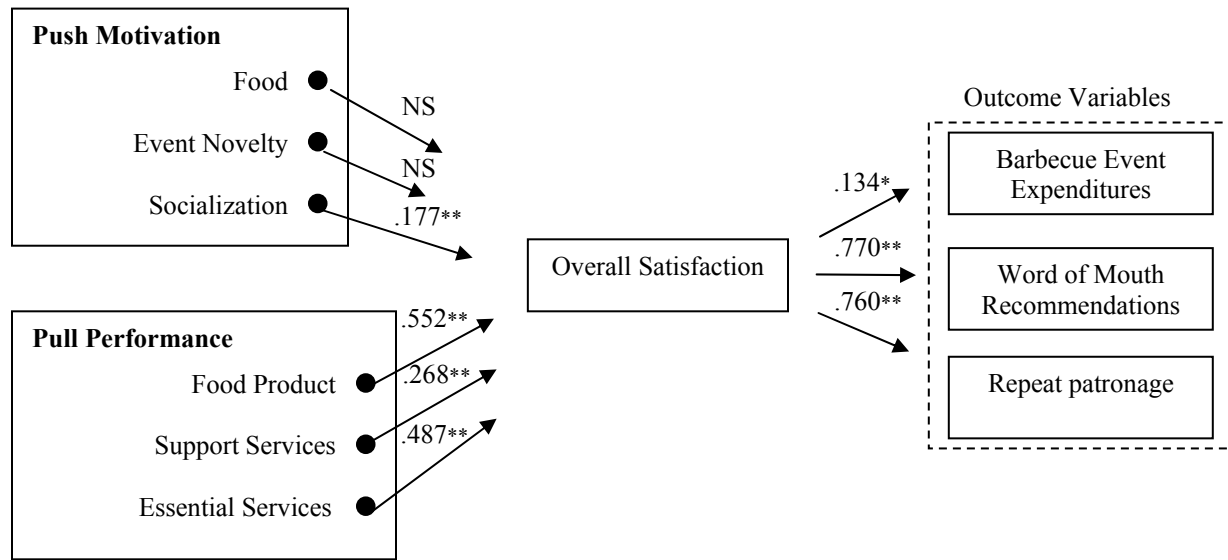
This research makes unique contributions to the area of consumer research in culinary tourism from both the theoretical and empirical perspectives. The current study constructed a causal model of culinary tourist behavior from the theoretical framework of push and pull motivations and related concepts with regard to satisfaction and behavioral intentions. Push motivations represent the internal needs of the individual initiating them to take a trip. Pull motivations are the external needs of the destination itself, motivating an individual to choose a specific experience. Push and pull motivations subsequently were examined for effect on overall satisfaction. This study proposed and results indicated that culinary event attendees’ expenditures, WOM behavior, and repeat patronage intentions would be affected by their overall event satisfaction.

The results suggested that satisfaction is a predictor of behavioral intentions. Findings revealed a relationship between overall satisfaction and expenditures, WOM behavior, and repeat patronage intentions. As culinary event attendees find satisfaction with their experience, positive WOM behavior and intentions of returning to the event are likely to increase. Likewise, as satisfaction decreases, so does positive WOM behavior and intentions to revisit the area.

It has been noted that in-depth research is lacking while examining the nature of culinary tourists (Hall & Mitchell, 2005). This is becoming increasingly important considering the growing segment of culinary tourists identified in the recent report by the TIA (2007). A more complete understanding of culinary tourists could provide insights for various stakeholders and allow marketers to more effectively target potential customers. Consumer

behavior research will provide important insights into who the culinary tourists are, what are their needs, and how to satisfy these needs. Utilizing information from this study tourism marketers and managers would be in better positions to effectively develop product bundles in order to satisfy the needs and wants of their culinary tourism market.

Figure 2
Correlation Coefficients Testing the Culinary Event Model



* $p < 0.05$, ** $p < 0.01$

The findings of this study were based on one culinary event. The geographic setting of the region and the event's location limit the generalizability of the findings. The findings and conclusions of this study may vary when a culinary event in a remote or rural region is analyzed. Future studies are cautioned by the limitations posed by the one event approach. A good range of culinary events should be examined to test the findings of this study.

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YET ANOTHER CHALLENGE FOR HOSPITALITY MANAGERS – GENERATION Y: A LITERATURE REVIEW AND FUTURE RESEARCH AGENDA

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ABSTRACT

This paper addresses the emerging challenges associated with the integration, into the hospitality workforce, of the latest generation of young workers, Generation Y. This is achieved via a review of the current state of hospitality employment, followed by an analysis of the general state of research on Generation Y. The paper highlights some of the main areas of concern for the future and provides a platform for ongoing research so as to enhance and accelerate the development of effective employment strategies for the hospitality industry.

Key Words: generation Y; services management; hospitality employment.

INTRODUCTION

Perhaps the most significant challenge facing the hospitality industry is its inherent reliance on people to fulfil the industry's basic functions (e.g. greeting guests, serving guests). The predominance of transactions in hospitality involve either direct or indirect employee-customer interactions, described by service management academics as the simultaneous production and consumption of services (e.g., Berry, 1995). It is the quality of these inseparable transactions, as perceived by the customer (Sachdev & Verma, 2004), that will give a hospitality business an edge over its competitors and ultimately make or break the success of that business (Bettencourt & Gwinner, 1996). Managers, then, must maintain steadfast attention beyond the challenges of not only managing individuals *in* the workplace (e.g., Gronroos, 2000) but also on the continuing importance of all human resource functions (e.g., attracting, selecting, training, motivating and rewarding).

One suggested strategy for gaining competitive advantage is to utilise the 'resource-based view' of a firm. According to the resource-based view (RBV), differences in firm profitability are often due to the capabilities that are *internal* to a firm—including expertise, systems, and knowledge (Voola, Carlson, & West, 2004). Apart from the relatively rare scenario of a natural-resource monopoly, the intangible resources of a firm, particularly its human resources, internal functions and processes, are more likely to produce a real competitive advantage—because engaged and committed employees who render quality services are difficult for competitors to emulate (Hitt, Bierman, Shimizu, & Kochar, 2001).

Another strategic approach used in gaining competitive advantage comes through a 'service orientation'. Such an 'orientation' can be thought of as a strategic response and a distinctive way of implementing the firm's marketing concept, competing by means of outstanding service to enhance competitive advantage and customer value. There is mounting interest in the service orientation concept – both conceptually and empirically – as it appears to be one defining factor in the creation of superior customer value (Lytle & Timmerman, 2006). A service orientation only exists if it is *perceived* by the employee. This point is particularly salient in service businesses where face-to-face service encounters take place regularly, as it is the perceptions of employees as to the extent to which the firm's leaders practice service excellence that most influence the quality of customer interactions.

Gaining competitive advantage via the RBV or service orientation strategies seems an easier-said-than-done proposition. This is particularly the case in an industry which is so people-intensive, lacking in career path options and beset by high employee turnover. The hospitality industry has always found it hard to attract suitably trained, qualified and motivated employees that are able to deliver on the service promises that organizations make to their potential customers. Hospitality has a poor reputation as a source of permanent employment, offering low pay, anti-social working hours, menial work, and limited opportunities for career progression (Baum, 2002; Wood 1995). The paradox here is that the hospitality industry is the world's largest and fastest growing industry (Milne & Ateljevic, 2001), accounting for 10 percent of global employment (Baum, 2002) and with demand increasing exponentially (WTO, 2000). Concomitantly, demand for hospitality employees is increasing alarmingly, and it is becoming apparent across all industries that demand for employees is going to outstrip supply (Bishop, 1999).

Recent trends in demographics compound the difficulties in attracting and retaining quality employees. Traditionally, hospitality enterprises have relied on large pools of young labor to fill their frontline staffing requirements (Magd, 2003). As the populations of all developed nations age, there are less and less young employees to go around. The baby boomers, the largest generation in the current workforce (Sutton Bell & Narz, 2007), are starting to retire. Levels of new entrants to the workforce have been falling in industrial countries around the globe for some years now, as birth rates continue to drop (Magd, 2003). In Australia for example, in recent years, the working age population has increased by 170,000 people per year. This figure is set to fall dramatically – for the entire decade of the 2020s, the labour force will grow by only 125,000 (Bishop, 1999).

Not only do demographics exacerbate the problem, but there is also the emerging issue that the work-related characteristics and attitudes of the latest entrants, the so-called Generation Y (Gen Y), are radically different to those of previous generations in the workforce. Also known as Millennials, the new recruits are born between the years of (approximately) 1979 and 1994 (Martin, 2005; Loughlin & Barling, 2001). Naturally, some of this generation are still in school, but the oldest members, the “first wave” (Paul, 2001:45) born between 1979 and 1985, are already actively participating in the workplace, and the “second wave” (Paul 2001:45) born between 1986 and 1991 are now beginning to enter the workplace on a more full-time basis. It is being widely noted that Gen Ys possess a particular set of work attitudes and characteristics that are incongruent with conventional thinking on how new entrants to the labour force should think and act (Glass, 2007; Martin, 2005; Morton, 2002). The literature is relatively consistent in its description of Gen Y's work-related attitudes and behaviours. Demanding and with a low tolerance for boredom, Gen Y thrives on new challenges and expects to be shown respect and given responsibility from early on in their employment (Glass, 2007; Martin, 2005). This new generation is extremely technologically literate, self-reliant, independent and looking for instant rewards, where long-term means twelve months (Martin, 2005). They are looking to make a contribution to something worthwhile, to have their input recognized from the start and are not willing to put in years of service in order to gain any significant reward from their employer (Martin, 2005). Matching the motivational, training and development needs of Gen Y employees with appropriate and effective employment strategies would appear to be the human resources challenge for the hospitality industry of the future.

Given changing employee demographics, globalisation, supply-demand imbalances in the workforce, as well as ever-growing demand for hospitality businesses, it would appear as if new paradigms for understanding employee attitudes, motivations and behaviours are needed. As a starting point to altering existing paradigms, a timely review of these issues, their impact on and importance to the industry will be beneficial, as well as initiating a healthy debate on how best the industry can deal with these issues. This paper aims to provide the impetus for this informed and useful discourse. In order to do so, we first set the scene by considering the current state of employment issues in the hospitality industry, highlighting the key studies that have investigated the nature of hospitality employment and its impact on the effectiveness of the industry in achieving its goals. From there, a detailed appraisal of the state of thinking on Gen Y employees and their new set of work-related attitudes will be provided, including a discussion on the key academic literature that has investigated Gen Y as an employee, whether in the hospitality industry or otherwise. This review will create the basis for a discussion on how best to handle these issues so that organizations within the hospitality industry can successfully recruit, select, train, motivate and retain Gen Y employees.

HOSPITALITY INDUSTRY EMPLOYMENT ISSUES AND CHALLENGES

Employment in the hospitality industry has a mixed image. There is an outward perception of glamour, presumably from the proximity to the 'high life', that is contrasted with the notion of being a job of servitude and inferiority (Riley et al, 2002). Many studies have been conducted in order to explore perceptions of working life in the industry, such as Wood's (1997) analysis of employment in hotels and catering which revealed a list of negative themes that were quite common in the industry, including long and anti-social hours, low levels of pay, low status and high staff turnover. Other studies of employment in the hospitality industry have confirmed these themes found by Wood and have also added issues of excessive job demands such as emotional labour, lack of training and dysfunctional customer behaviour (Karatepe & Sokmen, 2006; Karatepe et al, 2003). In a study of undergraduate tourism students working in the tourism industry, Kusluvan and Kusluvan (2000) found that more than half the students undertook the course with inadequate information about careers and working conditions in the industry, and that once students had experienced work in the industry, unmet expectations tended to cement their unfavourable perception of the industry. These findings support the earlier work of Barron & Maxwell (1993) who found that direct experience with the hospitality industry had a negative effect on students' perceptions of employment in the industry, and as an unfortunate result, many hospitality and tourism graduates do not join the industry upon graduation.

The low retention level of graduates to the industry is a further challenge to hospitality employment generally not being viewed as a valid career in the first place (Macaulay & Woods, 1989; Choy, 1995). Studies have shown that, typically, up to 64% of a hotel's employees are engaged in operational and unskilled positions, which signifies that promotional opportunities are limited relative to the amount of employees that may desire them (Riley, 1991, as cited in Cheng & Brown, 1998). An Australian study supports these statistics, finding that 70% of occupations in the tourism industry require only low-level skills, compared with 39% across all industries combined (Industry Commission, 1996). Training provided by hospitality enterprises is often wasted when employees leave to work in other industries, which is an obvious deterrent to investing more than the bare minimum in training. The industry is a large employer with high levels of turnover, so demand for training does not match the supply (Gee, 1997). Standardization of hospitality training courses within a structured vocational and education system has eluded most countries so jobs are usually casual and tend to be filled by transient employees, who are waiting for jobs to become available in other labour markets, or are studying for a career in another industry (Finegold et al, 2000).

Turnover in the industry is almost accepted as inevitable. The turnover culture identified in the UK and Australian hospitality industry by Deery (2002) found some rates as high as 300% per annum. In a series of studies, high turnover in the industry has been attributed to work-family conflicts, as a result of the poor working conditions and constant emotional labour from customer contact (Karatepe & Kilie, 2007; Karatepe & Baddar, 2006). A study conducted in hotels in Hong Kong found that most turnover occurs in the first few months of employees (Lam, Lo & Chan, 2002), suggesting that it is extremely important to deliver on the expectations on new employees in order for them to feel satisfied with their new jobs. In a profile of housekeeping workers, Hunter Powell & Watson (2006) identified the autonomy of the worker as a key factor and observed that staff were required to work with "independence and initiative" (p302). This finding conflicts with the observation of some authors that management styles in hospitality organizations are, in the main, autocratic (Haynes & Fryer, 2000). This also contrasts with the findings of a review of skills training in the hospitality sector, where Baum (2002) commented on the contradiction between employers wanting to find employees who follow directions well, and then expecting them to display initiative when on the job.

Some authors have highlighted the impending problem that demographic changes pose for hospitality labor markets and focus on the industry's unwillingness to hire older workers as a major part of the impending problem (see for example Magd, 2003; Lyon & Moggendorff, 1991). Furunes & Mykletun (2005) sound out the benefits of making hospitality businesses more age-friendly, so as to encourage older workers to the industry. Whilst making hospitality workplaces more friendly to a diverse range of work groups is always a laudable goal, none of these studies dealt specifically with how to successfully attract and retain the youngest workers, albeit if the amount of them entering is a smaller proportion than in previous decades. Given that issues of attracting qualified staff to the industry and then giving them adequate training and motivation to stay and deliver on high levels of customer service has always been an issue for the hospitality industry, it is important to shed some more light on the defining characteristics of Gen Y, in order to best understand how their entrance to the workforce will need to shape employment strategies into the future.

WHO ARE GENERATION Y?

While there is some debate over the actual age ranges, it is generally agreed that Gen Y refers to those born between the years 1979 and 1994 (Yan, 2003; Loughlin & Barling, 2001). The Gen Y employee is described as more demanding than new employees have ever been before and they are unafraid of expressing their opinions (Earle, 2003). This is a result of having had more involvement in family decisions than previous generations (Eisner, 2005) and having lived at home for longer after finishing school (Szamosi, 2006). It appears that family time is more important to Gen Y than previous generations, and this is demonstrated by the results of a study in the US that show that only 12 to 13 percent of Gen Y are work-centric (placing greater importance on work than family) and 50 percent are family-centric, compared with 22 percent of baby boomers being work-centric and only 41 percent being family-centric (Families & Work Institute, 2002).

The largest generation since the baby boomers (Sutton Bell & Narz, 2007), Gen Y children have grown up in relative affluence but in an uncertain world, connected 24/7 to the events of the world through the advances in advances in information technology (Eisner, 2005). Multi-tasking is a habit, where 30 hours of content can be crammed into a 7-hour period (Millwood, 2007). This creates a low tolerance for boredom and Gen Y can be very selective in the way they receive information – the more interactive it is, the more it will ‘pull’ them towards it (Goman, 2006; Knight, 2000). Raised in non-competitive environments that place importance on participation over being the ultimate winner, Gen Y are used to being praised for their efforts, rather than their results (Hill, 2002). In the workplace, they seek constant feedback, even on a daily basis (Glass, 2007; Martin, 2005). On the whole, they dislike menial and repetitive work and seek new challenges regularly (Saba, 2006; Martin, 2005).

Gen Y is receiving more and more attention in the business literature and there are three streams emerging. While none of these streams yet consist of any significant amount of peer-reviewed literature, one takes a marketing perspective where it places Gen Y as a customer (see for example Yan, 2003), another looks at Gen Ys from the angle of education and training (see for example Rodriguez & Gregory, 2005), while the third stream takes the human resources perspective of hiring Gen Y as employees (see for example Szamosi, 2006; Martin, 2005; Buckley et al, 2001). None of these studies consider the specific nature of the hospitality industry and there is scant published material about Gen Y as employees in the hospitality industry that these authors are aware of. Some brief articles in hospitality trade journals have begun to pay attention to the idea that Gen Y employees think and behave differently to previous generations but only point out the characteristics and do nothing to explain them or suggest how to deal with them (see for example, Millwood, 2007; Saba, 2006).

In a conceptual paper where Hill (2002) reflects on his own experiences with Gen Y through university, he describes the differences (and similarities) between Gen Y and previous generations that will have a major impact on the effectiveness of Gen Y's managers. Hill posits that a major point of difference is the nurturing and non-competitive family environments that Gen Y has largely grown up in and the subsequent effect this has had on Gen Y's perception of their own performance. While members of previous generations have often been benchmarked against each other, Gen Y has been told by their parents that participation is the key, the outcome is less important. In an outcome-oriented workplace, this could present major problems for a Gen Y employee in terms of measuring their own ability and performance, as they struggle with the difference between “I can't do it” and “It's hard to do” (Hill, 2002:65).

In another conceptual review, Loughlin & Barling (2001) analyse the events that have had a major influence on Gen Ys' work-related attitudes and behaviours, focusing on the early work experiences of this generational cohort as a guide to assessing their future attitudes and behaviours. It is argued that early work experiences have a formative effect on future attitudes towards work, and that ‘poor quality’ employment early on leads to less opportunities for developing skills and learning, which in turn engenders low levels of motivation, increased cynicism and lower work values. The authors caution against promising conditions to young workers which are not obtainable, as findings in the food-service industry illustrate that it is not so much the low pay of actual work that alienates young workers, rather the poor behaviour of management towards them. Loughlin & Barling also point out that there are significant changes occurring in the workplace that will affect all workers, not just Gen Y, yet it will be Gen Ys' reaction to the new workplace that will be most significant in the future. Building on the notion of changing workplaces, one study, while not concentrating on any one generation or workplace, describes the changes that are occurring in workplaces around the globe. In his report, Tulgan (2004) contends that the work environment is dramatically changing in six main ways: work is becoming more demanding; employer-

employee relationships are becoming more transactional; there is movement away from long-term employment relationships; employees are losing confidence in long-term rewards and have greater expectations for short term rewards; immediate supervisors hold the most important roles in the workplace; and employee supervision now requires more time and skill from managers.

A few papers concentrate on Gen Ys' perceptions of work post-graduation, and what their expectations of that work will be. Broadbridge et al. (2007) surveyed Gen Y students in the UK and their expectations of retail employment and found that their major expectation was to enjoy their job, combined with concerns for fairness, tolerance and equity in the workplace. Szamosi (2006) found similar results when researching Gen Y students' expectations of small and medium enterprises (SMEs), in that they wanted to work for caring and sensitive SMEs that are environmentally-concerned. These students also expected tangible and intangible rewards, empowerment, respect, workplace involvement, concern for employee welfare and supportive management.

Other papers investigate Gen Y's work-related attitudes and behaviours based on actual work experiences rather than future expectations. Eisner (2005) investigated the perceptions from work experiences of Gen Y students in a US college and found that overall, Gen Y's perceptions of management competence was very low, and this was significantly related to job satisfaction. Eisner poses the question of whether increasing job satisfaction will increase perceptions of manager's competence or whether a manager first needs to be perceived as competent for job satisfaction to be achieved. Westerman and Yamamura (2006) present a cross-generational study of 234 accountants in the US to determine any significant differences in attitudes of baby boomer respondents and Gen XY (combining as one Generation X and Generation Y) respondents. They found that goal orientation and system work environment fit were more relevant to the job satisfaction and intention to stay of Gen XY employees than baby boomers. Unexpectedly, they also found that Gen XY generally experience lower levels of job satisfaction than baby boomers.

This current piece of work was initially motivated by the lack of research which investigates the effects, impacts and issues surrounding the Gen Y workforce in the hospitality industry. Some research has been conducted in this area, although most of the past research is limited in scope and may not have set out to deal with Gen Y specifically. An exception to this is a qualitative study of Gen Y's experiences and perceptions of careers in hospitality management conducted in the UK, which found that there is potential for conflict between Gen Y's described work-related preferences, attitudes and expectations and the reality of the contemporary hospitality industry (Barron et al, 2007). Rodriguez & Gregory (2005) undertook a qualitative investigation of transfer of training in dining service units at a university. These authors acknowledged that their target sample entirely consisted of Gen Y students and so not surprisingly, their results reflected the described attitude and characteristics of the Gen Y cohort. A study by Lewis & Airey (2000) into secondary school students' attitudes towards tourism careers touched on some of the defining characteristics of Gen Y and found that tourism careers opportunities were perceived well by those students that were actively interested in self-development and working with friendly people. While there has been some preliminary work done to better understand how Gen Y will be integrated into the hospitality industry and how it will be re-shaped as a result, there is as yet a long way to go in developing this understanding, hence the purpose of this paper.

MOVING FORWARD

Given that hospitality employment is described as menial and low-skill (Wood, 1997), there is much potential for work-family conflict (Karatepe & Kilie, 2007), employment strategies concentrate on cost reduction and numerical flexibility (Knox & Wood, 2005) and the resulting management style is generally autocratic with poor communication (Haynes & Fryer, 2000), the special needs of the new entrants to the labor pool appear to be at odds with the prevalent conditions in the industry. Current human resource practices in the hotel industry undervalue the employee and thereby engender low levels of commitment to the job and to the organization (Maxwell & Quail, 2002). Being part of something worthwhile has been listed as an important concern for Gen Y – low levels of commitment to the organization are not likely to make them feel like their job is worthwhile performing.

The aim of this paper is to facilitate informed discourse, scholarly debate and future research directions in relation to the future challenges faced by the hospitality industry in respect to understanding Gen Y in the workforce. Our position, and impetus, for this paper and future aspects of this research project, is to provide the hospitality and tourism industry with clear recommendations regarding contemporary employee supply, demand and motivation. Interestingly, there are many relevant management and organizational concepts – such as organizational

commitment (Cohen, 2007), organizational citizenship behaviour (Organ, 1988), organizational culture (Schein, 1985) and job satisfaction (Silvestro, 2002) – all of which could be more effectively utilized within the hospitality industry *if* the specific needs and attitudes of Gen Y workers were better understood. For example, the formation and administration of employee attitude surveys might be altered or revised once this new generation of worker is better understood. Some hospitality industry employers are already practicing techniques which are designed to appeal to this generation. For example, some companies are using videos loaded onto iPods to broadcast daily events, announcements and other communication, as well as for new staff orientation and training programs. In another example, Hard Rock Café has re-designed all its training manuals to cater for Gen Y's propensity for boredom, where each page has less information on it than previously, instead using lots of space and large letters to draw the attention of the reader to the content (Knight, 2000). Already we have seen interesting challenges facing, for example, national political pollsters in different parts of the world, because of outdated data collection processes (e.g., telephone polling at dinner time, when many younger people are either not home, or no longer use land line telephones. It is quite possible that the hospitality industry, stuck on old paradigms of employee practices, could also face reduced effectiveness if it is not able to achieve this enhanced understanding and replace out-dated, traditional practices with more effective practices that are new and cutting-edge.

This paper represents the commencement of a project aimed to provide hospitality and tourism operators with guidelines that indicate human resource practices that can be employed to best match the demands of both employees and employers. Concentrating on operational employees and within the context of Gen Y, some of the relevant questions which require attention and future research include:

1. How will the supply / demand balance of employees to positions available change over the next 1, 5, 10, 20 years? What are the impacts of this? What strategies can be implemented which can overcome this imbalance?
2. What are the relationships between employee age / position / loyalty and organizational commitment?
3. How can hospitality industry employers enhance Gen Y's job satisfaction? (e.g. what are the 'drivers' of job satisfaction). How can the industry effectively utilise management practices such as empowerment, respect, involvement and the provision of supportive management / workplaces?
4. How might hospitality employers engender organizational commitment amongst Gen Y employees?
5. How might hospitality employers utilize new forms of communication that solicit appropriate and positive responses from Gen Y employees? (e.g. examination of social communications theory / its evolution across demographics and generations).

We are particularly interested in learning about the psyche of the Gen Y worker. We might find that some of the characteristics identified in the literature may be, at least to some extent, rhetorical and self-fulfilling. One of the big unknowns is this question: How much of the idiosyncratic characteristics of Gen Y employees are in fact influenced or driven by what Gen Y employees hear in the press, in the literature, and from each other? Hence, do they really differ as much as the rhetoric suggests? After all, Tulgan (2004) points to paradigmatic shifts in the workplace that affecting all employees, regardless of generational identification. It is these questions, and those above, which interest us, which interests industry, and which should drive the research agenda in this very important area.

Driven by the questions above, we have mapped a research program, which will utilise a number of data collection and analysis approaches. Firstly, we will utilise a convergent interview process (Dick, 1990) engaging hospitality operators across the spectrum of industry sectors in order to identify key issues and themes most relevant to Gen Y in the workforce. Following this exploratory phase, we will then conduct a series of focus groups with hospitality employees – aiming to identify common themes and distinctions between Gen Y and non-Gen Y employees. From these exploratory phases, we will then work toward a more quantitative approach, utilizing surveys across large groups of hospitality employees to gauge the attitudes and opinions along a range of relevant dimensions. We acknowledge that this paper represents merely a starting point – but one which is necessary during the early stages of such a research endeavor. We suggest that this research will provide great benefit to industry, as more practical and informed information and advice would be welcomed and presumably useful in managing hospitality businesses that are so reliant on young (read Gen Y) employees.

Finally, the need to understand the future employees in the hospitality industry is glaringly obvious. Yet there is a lack of research in the hospitality industry literature answering some of the most important, yet very basic,

questions about how to understand, attract, train, motivate and retain Gen Y's. It is quite surprising that so little is known about this latest generational development in an industry that could clearly benefit from such research. This paper is one attempt to redress this imbalance and to encourage further research, knowledge, discourse and insights.

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EVOLUTION OF CANAL FROM TRANSPORTATION TO TOURISM AND LEISURE: THE CASE OF THE NEW YORK CANAL SYSTEM

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ABSTRACT

This research evaluated the evolution process of New York Canal System from a commercial shipping waterway to a tourism and leisure destination. The research approach for this study was to analyze transportation and tourism life cycles of the Canal System. SWOT analysis was followed to assess the operation status quo and future development trends. This study clearly indicated that life cycle model should not be overtly employed as a framework of destination development. And SWOT analysis further suggested that Canal destinations have unified management and establish mutual beneficial partnerships with communities, federal and state, public and private agencies and organizations.

Key Words: New York Canal System; transportation; tourism; leisure; life cycle; SWOT analysis.

INTRODUCTION

The Tourism Area Life Cycle (TALC) model is one of the most vigorous and widely used theoretical and managerial frameworks in the tourism area (Baum, 1998). The TALC studies are of the great value to assist in creating legitimization for and direction of tourism development; crafting and executing industry policies; and managing tourism and hospitality enterprises (Butler, 2006). Reviewing the empirical cases employing TALC in the destinations, nearly all the studies analyzed the historical path starting with the emergence of tourism activities and extended to the future development trends (Rodriguez, Parra-Lopez, & Yanes-Estevez, 2007). The stories before the embryo of tourism have never been explored. The analysis appears to be incomprehensive for the destinations with tourism as an alternative of the economic engine after the industry declining in the local area. Because the stories before the emergence of tourism activities significantly contribute to a series of operation and management issues in the current destinations, including comprehension of the industrial relics, transmission of management rights, communities' involvement, and tourists' attitudes. Among those destinations, canals may be the typical ones, in which destinations tourism and leisure is a rejuvenation approach with commercial shipping coming to the end. Accordingly, the evolution process of canal destinations is definitely the combination of transformation life cycle and tourism life cycle. The research of canal evolution not only expanded the application of TALC model, but also enriched the body of literature in canal tourism. For the rapidly-developing canal destinations, the related research is too limited (Casado, 2001; London, 1998; Shipley, 1999). Although academics noticed the considerable potential of canals as tourism destinations, the deficiency of substantial data extinguished their research enthusiasm. Especially to understand the entire life stories in the canal destinations, the cross-sectional analysis of both transportation and tourism with historic data for several centuries are needed. This makes researchers to shrink back at the sight of difficulties.

Such is the case of New York Canal System, the focus of this study. As a national famous historical canal, New York Canal System experienced strenuous transformation and advance process, and encountered various predicaments in operation, maintenance, development and improvement. New York Canal System could be viewed as a representative case of canal tourism destinations. The paper is organized as follows. The evolution and advancement course of New York Canal System was first investigated via evaluating the life cycles of commercial shipping between 1840 and 1997 and tourism between 1980 and 2006. Targeting on the current stage of life cycle the canal destination stands at, SWOT analysis was further employed to assess its internal and external environment, through which the management authority could gain insight in the operation framework of the canal destination, and accordingly commence proper actions. It also will give some implications to other canal destinations, which are

urgently needed for theoretical guidance, experience share and communication in management, marketing, and environment and heritage protection.

INDUSTRY LIFE CYCLE AND TOURISM AREA LIFE CYCLE

Life cycle models do not only belong to the phenomena of the biological organism. Industries also live through a similar cycle of life. As a person is born, grows, matures, and gradually decline and ultimately dies, so too do industries. Industry life cycle (ILC) is used to analyze the effects of an industry's evolution on competitive forces (Gort & Klepper, 1982). Although different approaches of stage identification existed in the views of researchers (Anderson & Zeithaml, 1984; Fox, 1973), the tendencies industry life cycle models depict are similar. In the canal cases, the decline of transportation industry cycle is not the ending of the canal, which is just the initiation or beginning of tourism life cycle. In other words, tourism development could be viewed as an innovative reuse for the canal regions or an extension of its transportation life cycle.

The introduction of life cycle models to tourism areas dated from 1939. Gilbert (1939) considered three stages to the tourism area life cycle: discovery, growth, and decline. There are also several authors that put forward four stages from introduction to growth, maturity and decline (McCarthy and Perreault Jr., 1995; Morrison, 1994). Butler (1980) proposed the six-stage tourism area life cycle: exploration, involvement, development, consolidation, stagnation, and poststagnation (stabilization, rejuvenation, or decline). It is one of the best known theories explicating destination growth and changes (Lundgren, 1996; Russo, 2002) and has been widely employed in many empirical cases (Cooper and Jackson, 1989; Braunlich, 1996). Although the TALC was accepted as an appropriate framework for many cases (Braunlich, 1996; Russel, 1995; Knowles & Curties, 1999), some exceptions existed. In the case study of Lancaster County, Pennsylvania, Hovinen (1981, 1982) got the conclusion that the destination departed significantly from TALC in the late phases, and the case site (Lancaster County) was characterized by the coexistence of growth, stagnation, decline and rejuvenation. Getz (1992) found that life-cycle concept is empirically against observed development approach in Niagara Falls, with many points of divergence were unidentifiable to some stage. As Cooper and Jackson (1989) summarized, the TALC should not be overtly used as a framework for analyzing changing destinations. Because the TALC is "time-sensitive", the stage at which some time point is situated will be identified differently at different reference spot.

Haywood (1986) suggested that the life cycle should be made operational or practical to the destination. He further put forward six concepts to explicitly identify stages and turning points, including unit of analysis, relevant market, the unit of measurement, determination of the relevant time unit, pattern and stages of the TALC, and identification of the area's shape in the life cycle. Unit of analysis tackles the problem "what is the region" and "what type of region is it". Relevant market considers the marketing situation by market type and market segment. The widely-used units of measurement included the visitor numbers (Oglethorpe, 1984), number of beds (Ioannide, 1992), tourist board budget (Weaver, 1988, 1990, 1992) and so on. The last operational indicator is relevant time unit, for example, year or month. The measurement requirement of TALC suggested by Hovinen (2002) had a large similarity with Haywood (1986)'s, which includes boundary analysis and pathway analysis. Boundary analysis focuses on the same issue with unit of analysis---the tourism area. "Path analysis" aims at acquiring comprehensive knowledge of tourism development in the destination. It encompasses the remaining factors (internal characteristics, resort morphology, users, macrostructural, conditional) in order to reveal features of facilitation, tolerance or inhibition and some others that have arisen. The research adopted Hovinen (2002)'s approach of stage identification.

NEW YORK CANAL SYSTEM

Canal System Life Cycle Analysis

Boundary Analysis

New York Canal area investigated in the study includes both water-based and landside-based parts (Figure 1). The Canal waterway is 524 miles long and consists of four interconnected canals: The Erie Canal, The Champlain Canal, The Oswego Canal, and Cayuga-Seneca Canal. The landside area of the Canal System was classified into three parts in 1995 Recreationway Plan: canal-owned land, canal corridor, and 25 counties through which the canal pass. Canal Corporation owned approximately 36,000 acres of land, which include waterways locks, other canal structures, and lands adjacent to the canals owned by the Corporation. Canal Corridor includes over two hundred cities, towns, and villages immediately adjacent to the canals, which totals over 750,000 acres. The 25 counties that pass through the canal have the total area of over 1,800 square miles and they could be classified into seven regions: Erie-Niagara; Genesee-Finger Lakes; Eastern and Central Southern Tier; Central New York;

Herkimer-Oneida-Montgomery; Capital District; Lake Champlain-Lake George (New York State Canal Recreationway Commission, 1995).

Path Analysis

With the scope of New York Canal destination stated above, the following context was “path analysis” of its entire evolution process, crossing industry life cycle in transportation period and the tourism area life cycle in the consequent period. The transportation life cycle was measured by the originating tonnage (only trips which had their canal point or entry on the canal) of commercial shipping on the waterway between 1840 and 1997. And the tourism area life cycle was identified with the locking number of pleasure/recreation vessel traffic between 1980 and 2006. The analysis is composed of both the qualitative approach on stage identification and quantitative approach on analyzing the chronological data. The information employed in the life cycle analysis was from the internal documents of Canal Corporation, map observations, and direct interviews and question surveys on planning officials and key staff of New York Canal Corporation.

Industry Life Cycle of Canal Transportation

Embryonic (1817-1834): The embryo of New York State Canal System traced back to 1817, in which year the act authorizing the construction of Erie and Champlain Canal passed the legislature after six-year discussion and investigation. The Champlain Canal entirely opened in 1823, followed by the wholly opening of the Erie Canal in 1825. The shipping cost of wheat from the Genesee Valley to Albany dropped from \$100/per ton to \$5/per ton, and the shipping time was also shortened from 20 days to 10 days. The scale and speed of economic development was exceptional. The traffic development also brought about the prosperity of industries on the bank of the Canals.

Growth (1835-1872): In 1835, the management authorities decided to make a large-scale enlargement, to increase the competition power of New York Canal. The construction lasted for the 25 years. By 1845, the effect of the Canal enlargement was already manifest that extensive traffic were found on all of the water channels. The enlargement construction was finished in 1862 (Whitford, 1905).

Decline (1873-1918): By the 1890s, the commercial shipping of the waterway began to go downhill. With the advancements in steam locomotive technology, the railroad traffic took over most passengers on the waterways. In addition, the Erie Canal and Champlain Canal were already outdated due to rapid development of steam-powered and steel vessels. Realizing the predicament of the Canal shipping, Canal management authority began to construct a new type of barge canal. Between 1914 and 1918 the commercial shipping fell to the bottom under the cloud of the Second World War.

Rejuvenation (1919-1951): After a period of transformation, waterway traffic grew swiftly in the following 20 years. Transportation amount increased from 1.5 million tons in 1920 to 4.6 million tons in 1940. However, with the coming of the Second World War, the waterway transportation plunged to 3 million tons. The waterway traffic recovered for a short time period in the early 1950s. The usage of New York Canal System got to the peak in 1951. However, the modern Canal at no time reached the historic high utilization of the Old Erie Canal.

Final Decline (1952-): Commercial shipping began to drop in the late 1950s and continued to decline gradually without upward symptom. The competition with railroad, the interstate highway system and the high-speed semi-trailer were believed to be the main reason of the shipping fall on the waterway. The opening of the St. Lawrence Seaway, with its superior capability to accommodate large ocean-going bulk-cargo carriers, also contributed to the traffic loss of New York Canal System. By 1980, the usage tonnage dropped to 1.1 million tons. The Canal Management Authorities and local communities both realized the ending of commercial shipping and began to search for other development approaches (New York State Canal Recreationway Commission, 1995).

Life Cycle of Canal Tourism

Exploration & Involvement (1918-1980): Before the Canal System was transformed to a tourism destination, the formative role of the Canal System in the history of New York State and the nation had led to an extraordinary abundance of historic, cultural, archeological, educational and interpretive resources in the canal corridor and neighboring regions. But the promotions of these attractions had individual approaches to underline a specific site, location or region, rather than a part of New York Canal destination.

Development (1981-1986): Since 1981, the Management Authorities began the exploration of revamping New York Canal System to a tourism destination after comprehensive evaluation of its tourism resources. The attempt gained extreme success. The lockings of pleasure/recreation vessel traffic boosted from 79469 in 1980 to 152433 in 1986. Canal Management Authorities decided to invest \$200 million on the revitalization of the waterway to improve its popularity as tourism and recreational routes in 1985.

Shakeout (1987-): New York Canal System experienced substantial shakeout since 1987. The lockings of pleasure/recreational shipping traffic dropped from 152433 in 1986 to 110105 in 1988 and then rebounded to 159141 in 1989, which reached the peak in history. Due to a shift away from family boating, which is also one of the recreational boating trends in the nation, the recreational shipping underwent the subsequent decline. An influential event in 1994 was that the recreational boating on the Canals was charged tolls, which had previous been toll-free for more than one century. This action severely thwarted the recreational shipping traffic in the following years. In 2006 the recreational boater tolls were suspended for the first time since 1994, and operation hours in spring and fall were lengthened. However, the recreational shipping traffic plummeted to the bottom due to the heavy and unrelenting rainfall in the navigation season.

Figure 1. Commercial Shipping Life Cycle of New York State Canal System

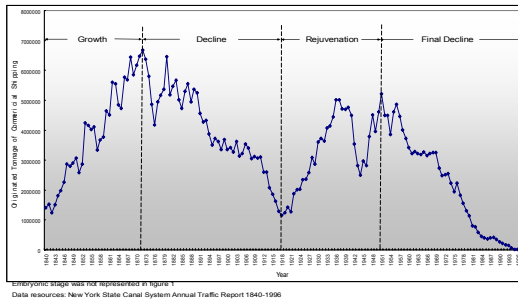
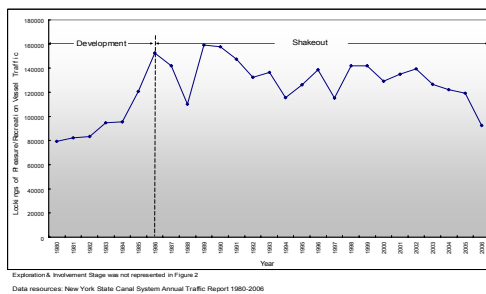


Figure 2. Tourism Life Cycle of New York State Canal System



SWOT ANALYSIS

Life Cycle models explained the evolution process of New York Canal System. SWOT analysis was further employed to represent its current internal and external environment, which will be of the great value in creating legitimization for and direction of future tourism development in the Canal destination (Jackson, Joshi, & Erhardt, 2003; Houben et al, 1999; Rizzo et al, 2005). The officials and main staff of New York Canal Corporation were involved into the environment evaluation of the Canal System.

Internal Analysis

Strengths

1. *Advantageous geographic location:* The Canal System connects with hundreds of miles of lakes and rivers across the Empire State, including Buffalo, Rochester, Syracuse, Utica, and Albany with New York City via the connection of Hudson River Valley. Nearly every major city in New York can be found along the trade route established by the Canal System. The Canal System neighbors on several important states of tourist sources, such as Ontario, Quebec, Ohio, Illinois, Pennsylvania, New Jersey and the New England states. The Canal System is also connected with Canada via five waterways. The advantageous geographic location provides immense potential tourist market for the New York Canal System.

2. *Sufficient Financial Support:* The management system of New York Canal waterway is not complex. As mentioned above, New York Canal Corporation is a public benefit corporation and a department within the Thruway Authority. Its parent Corporation Thruway Authority and the state government provide sufficient funds for upgrade, improvement and maintenance of the Canal System. The funds gained from federal government and thruway authority totaled 80 million dollars in 2006. Other funding sources also include widespread grants from local, regional, state, federal, non-profit and private organizations and the support of local communities. Taken as a whole, New York Canal System received steady and sufficient funding for the consistent and effective development.

3. *Affluent Tourism Resources:* The main tourism resources could be classified into water-based and landside-based. As commercial shipping has declined on the Canals, recreational boating has been on the increase. The main types of boating on the Canal include: local privately owned boats, transient boats, excursion boats, tour

boats, charter boats, and nonmotorized boating. The landside tourism and recreation facilities along the canal corridor are regional parks, local parks and canalway trail. The seven regions own more 100 state parks, county parks and local parks. There are about 245 miles of Canalway Trails in use, which are located in the Albany, Syracuse and Rochester areas. The trails will be extended to Champlain, Oswego, and Cayuga Seneca and it is expected to become the longest multi-use trail in the USA.

Weaknesses

1. *The divergence of missions between Canal Corporation and its parent Corporation Thruway Authority:* New York Canal System today operates in a complex legal, political and policy framework. Therefore the interest conflict among several parties still could not be avoided. New York Canal Corporation had the over-time divergence on the core missions with its mother company, Thruway Authority. Many priority projects for the Canal Corporation “fall within the larger needs of the Thruway Authority and are statutorily defined as secondary priorities”.

2. *Scattered tourism resources:* Although there are rich tourism resources in New York Canal System, their distributions are scattered. Among the seven regions, Central New York is perhaps the region with the most diverse tourism and recreational sources along the Canal. Central New York Region has 24 state parks and seven county parks. The facilities range from the popular boating centers of Oneida Lake to the wilds of the Montezuma National Wildlife Refuge and the State Wildlife Areas, which together represent 90 percent of all the designated natural areas along the Canal System. Similar with Central New York, most of tourism and recreation facilities in the Genesee-Finger Lakes Region also focus on the natural area around Montezuma. The parks of Herkimer-Oneida-Montgomery and Capital District are primarily oriented towards cultural and historic resources. The Erie-Niagara Canal, Eastern and Central Southern Tier and Capital District have abundant water access and boat-launch facilities, providing various tourism and recreation opportunities along the Canal. With only two state-owned parks, no county parks and nine local parks, the Champlain Canal represents an overlooked recreational resource.

3. *Absence of the image:* The canal suffers not from a poor image, but rather from an absence of image. Most of the potential market, including local, regional and national market, is unaware that the Canal still exists and is operative. There are three main reasons for the absence of destination image. First, the public are usually unconscious about the affluent water-based and landside-based tourism resources in the canal destination. Second, the New York Canal System is lack of representative tourism products. Third, the seven regions that the Canal System passes through are only concerned with their own interests and have individual approaches that highlight a specific region, location or attraction. There is a lack of a unified brand image representing the entire New York Canal System.

External Analysis

Opportunities

1. *Global tourism trends of cruising, ecotourism and cultural tourism:* Worldwide trends reveal a qualitative and quantitative consolidation in the cruise industry, with cruising securing greater weight in the global “tourism pie”. The cruise market is primarily driven by the increasing aging population since cruising is principally embarked on by retired people (Crisil Limited, 2005). There is also a trend that an older, better-educated population in North America, including the U.S.A, increasingly will seek ecotourism and cultural travel products (Nowlis, 2007). As well known, the current growth in the number and proportion of seniors living in the United States is unprecedented. By 2030, the number of 65 years or older is expected to reach 71 million, or about 20% of the U.S. population (He et al., 2005). The Global tourism trends of cruising, ecotourism and cultural tourism, growing senior number and seniors’ tourism preferences undoubtedly provide brilliant environment for the development of the Canal System, which is viewed as a all-encompassing tourism destination with 524-mile waterway and a number of scenic, natural, historical, cultural and recreational landside-based assets.

2. *Huge leisure tourist market of New York State:* The New York State tourist market is large, diverse and increasing. New York State ranks fourth among all states in terms of the total domestic travel market, behind only California, Florida and Texas. According to the most recent statistics in 2006, travel trips to New York State totaled 113.11 million. Excluding New York City visitation, 46.10 million trips were for leisure or business purpose, accounted for \$24.633 million in direct expenditures (NYC & Company, Inc, 2007). Considering that Canal System is natural, historical, cultural and leisure assets and it cross four popular tourism regions of New York State, including Buffalo, Rochester, Syracuse, and Albany, the untapped state tourism market represents significant

opportunities for the Canal System.

3. *Partnership with Local Communities*: Canal Corporation developed mutually beneficial relationships with communities and local groups. These communities and local groups actively assisted Canal Corporation to explore new tourism resources, improve the environmental quality of the waters and lands, open public accesses to communities, and also involve into holding various tourism events. The main plans local communities participated in included the Canal Recreationway Plan, the Erie Canalway National Heritage Corridor management plan, local waterfront revitalization plans and the management plans of New York State Heritage Areas. Meanwhile, local communities also gained the support and coordination from the Canal Corporation in preserving, promoting and enhancing the communities along the Canal System via offering funds and services.

Threats

1 . *Severe environment problems*: Tourism is a double-edged activity. Although it could not be denied tourism development as a viable economic engine, its fast and sometimes uncontrolled growth also results in the degradation of the natural environment. For example, very limited sections of the Canal System are non-discharge zones. Vessels traveling along most sections of the Canal System could discharge a large amount of treated sewage from Marine Sanitation Devices directly overboard. Throughout New York State, the polluted water is used for drinking, agriculture and recreation, which directly harms the health of citizens and degrades quality of life. Additionally, invasive species, such as water chestnuts, zebra mussels and milfoil are also a problem along several fractions of the waterway.

2 . *Dredging predicaments*: The U.S Army Corps of Engineer is responsible for dredging operation of the Canal System. For a long period, the rate to fill in the channels of New York Canal System continuously exceeded the dredging capability of the maintenance fleet. The loss of mechanical dredging and hydraulic dredging annually has caused noteworthy impairment to channel dimensions. Depth issues plagued deep-draft recreational vessels and commercial boating, including sailboat, tour boat, tug boat and even historical craft such as the Tug Urger. However, well-established dredge sites which could be used easily by maintenance dredging forces only exist in relative limited geographic areas. In most areas, sedimentation occurs more gradually, and ultimately creates much larger areas of obstructed channels.

3 . *High water level and flood*: During the past 100 years, the watershed of the Canal System has undertaken an entire transformation as a result of changes in land use and development approaches. Many farmlands, forests and wooded areas throughout the upstream watersheds have been developed and now contribute to supplementary storm-water overflow. This has taken place while the hydraulics of the Canal System, the Canal conduits and water control facilities have not been modified to acclimatize to the upstream changes. These underlying problems have not been formally acknowledged and caused severe lose of Canal System in 2006. High water level and flooding also have considerable negative impacts on Canalside property owners, business owners and boaters, which could result in temporary road closures in low-lying areas, the damage of private docks and shorelines, and also economic loss of businesses along the Canal due to the closure of the System.

DISCUSSION AND IMPLICATION

When added to the conclusion that both industry life cycle and tourism area life cycle do not closely fit the New York Canal System case, which suggest that destination planning in New York Canal System make little use of the models. It again proves the opinion of Cooper and Jackson (1989) that life cycle model should not be overtly employed as a framework of the destination development. In other words, the stage naming and identification should follow the actual trend of the destination development rather than rigidly track life cycle models. Moreover, the stage at which some time point is located will be identified differently at different reference spot.

Global trends and its geographical location decide that the Canal System probably never entirely return to the arena of commercial shipping. Because Canal management authorities and the regions along the Canal will not allow the Canal to be obsolete, they will use whatever attractions they could to maintain it and continuously invest lots of funds like before. Therefore, to be a tourism destination will likely be a permanent approach of New York Canal System. This is also a common choice in many international or national tourism-directed canal destinations. In New York Canal System, pleasure vessel traffic shook drastically since 1987, and it even plummeted to the

bottom in 2006. However, the management authorities are inclined to admit the destination is at the stage of development, rather than stagnancy or decline. Uncertainty over the stage of tourism development probably reflects specific problems for the destination, and possibly short-term difficulties, such as management entitlement dispute, deficiency in tourism supplementary facilities, and absence of destination image, rather than an overall growth or decline trend.

Another interesting finding from the life cycle analysis is that Canal management authorities continuously play a key role in the destination evolution process. For instance, the global trends in the 1890s decided that many canals came to the end since the railroads carried most of the commercial traffic. However, in the case of New York Canal System, it rejuvenated for another thirty years with the significant incessant investment from the management authorities. Similarly, at any point tourism plummeted notably during the tourism-directed period, it was again management authorities that developed large projects in establishing the new attractions and improving ancillary facilities, so as to help canal tourism get out of the predicament. The overt interference of management authorities also may be the reason why evolution process of the Canal System diverted significantly from the life cycle models.

Although SWOT analysis was based on New York Canal System, it has implications for other canal destinations. In terms of management and operation, lack of unified management is the drawback of many canal destinations. In the case of New York Canal System, the Canal Corporation strived to emancipate itself from the Thruway Authority and restructured to free-standing public benefit corporation when realizing their internal conflict. However, the Thruway Authority provided important financial supports for the Canal Corporation. If an all-out retreat of fund monies happened immediately, the operation system of the Canal destination will land in a predicament. The Canal Corporation expected that the Thruway Authority could provide financial assistance in a seven-year transition period with gradually reduced assistance on an annual basis. During the transition period, Canal Corporation will actively seek other funding opportunities. Because canal destinations are complex legal, political and policy frameworks, many management entitlements could not be acquired by the main management authorities, such as dredging, flood control and management protection in the case of New York Canal System. Therefore, the compromise method is to develop more communication on these issues between the Canal Corporation and other authority parties. These ways to solve the problem of dispersive management are also applicable to other canals.

In regard to marketing strategies, visitors of many canal destinations are mainly from local residents or tourists within five-hour driving radius. New York Canal System also fell into such a predicament. Canal management authorities are suggested to identify broader target audiences for tourism promotion. More marketing efforts should be allocated to the potential tourists in nearby states, and as well as international tourists. Another marketing dilemma of many canal destinations is lack of a unified image. The regions along the Canal should be convinced that the coordination in destination promotion under one unified umbrella---a sector of Canal System could gain more success, rather than current individual approaches that underline a specific region, site or attraction.

Although this research provides useful lens, it also had some limitations. First, the data used in tourism area life cycle was restricted to pleasure/recreation vessel traffic. The landside tourism was not assessed due to lack of quantitative information. Another main limitation of the study is that the life cycle analysis is mainly from the view of management authorities. More attention should be given to the aspect of tourists. The research of canal tourism is still in its infancy, lots of case studies are needed to enrich the body of literature, such as Panama Canal; Suez Canal; Rideau Canal System, Eastern Ontario, Canada; Lachine Canal, Quebec, Canada and so on. The main issues of canal tourism, including brand and image, tourism attractions, and sustainable development, are suggested to be further exploited in the future researches.

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THE EFFECT OF DESTINATION IMAGE AND NATURAL DISASTERS ON THAI TOURISM

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ABSTRACT

This study examined the impact of travelers' destination image perceptions on behavioral intention on revisiting and making recommendations to others by using overall satisfaction as a mediation variable. The results found that destination images of 'quality of hotels and restaurants' and 'attractions of cultural and natural beauty' significantly influenced travelers' overall satisfaction. In turn, overall satisfaction had a positive effect on revisit intentions and recommendations to others. This study further investigated the moderating effect of perceived risk on the relationship of overall satisfaction and behavioral intention. The low-perceived-risk travelers had a more positive revisiting intention and were more likely to recommend to others than high-perceived risk travelers did.

Key Words: destination image, satisfaction, perceived risk, natural disasters, revisit, recommend

INTRODUCTION

The tourism industry is an important part of the economy in many developing countries such as Thailand and Indonesia. These countries have been identifying how travelers perceive the destination images and how these images are designed to satisfy the needs of the target market in order to understand the pattern of traveler behavior (Castro, Armario, and Ruiz, 2007; Ibrahim and Gill, 2005). According to the World Tourism Organization (WTO; 2005), India, Sri Lanka, Indonesia, and Thailand combined make up 3% of the world's tourism market, and Asia Pacific was the world's fastest growing tourism region in 2004. In Thailand alone, the tourism industry accounts for 5.1% of the nation's Gross Domestic Products (Tourism Authority of Thailand, 2005). Unfortunately, the recent natural disasters - Severe Acute Respiratory Syndrome (SARS) and tsunami - have had an impact on tourist traffic and the number of tourists in Thailand (World Tourism Organization [WTO], 2005). The SARS crisis reduced the number of tourists by 44.8% in April 2003 compared with the same period of the year 2002. About 1.2 million foreigners cancelled trips to Thailand because of the tsunami, costing the industry \$750 million (WTO, 2005). The devastations become a challenge for tourism in Thailand and its destination image. Research is needed to explore how natural catastrophes affect the image of a destination and travelers' future behaviors. Therefore, the purposes of this study are to: (1) explore tourists' perceived destination images of Thailand and their behavioral intentions by mediating overall satisfaction, and (2) assess the moderating effect of perceived risk on the relationship between overall satisfaction and traveler behavioral intention.

LITERATURE REVIEW

Destination Image

The most commonly cited definition in the research of destination images is by Crompton (1979:418) who called it "the sum of beliefs, ideas and impressions that a person has of a destination". Pool (1985) stated that the individual's experiences with destinations would influence the evaluation of alternative destinations on the next trip. Furthermore, lack of any optimistic experience influences the perceived quality of the location and visitor satisfaction. Chon (1991) found that destination image attributes were significantly correlated to satisfaction with a destination's product. Destination image exercises a positive influence on satisfaction. In other words, the more favorable the image, the higher the tourist satisfaction (Fakeye and Crompton, 1991).

The study of Rittichainuwat, Qu, and Brown (2001) assessed the image of Thailand and identified strengths and weaknesses of Thailand as an international travel destination. Positioning Thailand as a shopping paradise put Thailand more directly in competition with Singapore and Hong Kong. Thailand had a positive image as a safe travel destination and for adventure activities, scenic natural beauty, rich culture, good-value cuisines and hotels,

easy access, and good shopping. These positive images were consistent with the previous study of Yau and Chan (1990), in which Thailand was perceived as a safe destination with beautiful beaches, reasonable prices, friendly people, and various attractions such as amusements and nightlife entertainment. These positive destination images affect repeat visitation: the more positive and fewer negative images of a destination, the more likely travelers would return to that destination (Rittichainuwat et al., 2001).

Overall Satisfaction

Baker and Crompton (2000:785) defined tourist satisfaction as “the emotional state of tourists after exposure to the opportunity or experience”. Studies of traveler behavior emphasize customer satisfaction as the core of the post purchase, because customer satisfaction leads to repeat purchase and favorable word-of-mouth publicity (Bolton and Lemon, 1999; Yuksel and Rimmington, 1998). Meanwhile, Kozak (2001) found the relationship between overall satisfaction and intention to make a repeat visit. Lee, Yoon, and Lee (2007) investigated the tourist perceptions of perceived value, satisfaction, and recommendations in Korea. The result indicated that traveler satisfaction had a significant impact on recommendations to others. Jang and Feng (2007) suggested that destination management should take special care of visitor satisfaction because satisfied travelers would come back to experience this satisfaction again within a short period.

Intention to Revisit and Recommendation

Blackwell, Miniard, and Engel (2001:285) described intention as “subjective judgments about how we will behave in the future.” Fishbein and Ajzen (1975) explained behavioral intention as the function of (1) evaluative beliefs toward the tourist product, (2) social factors that tend to provide a set of normative beliefs to the tourist, and (3) situational factors that can be anticipated at the time of the vacation plan or commitment.

Castro et al. (2007) evaluated the effect of the image of a destination—with respect to service quality and satisfaction—on future behavioral intention. The findings found a strong indirect relationship between destination image and future behavior of tourists—intentions to revisit and recommendations to others—by mediating tourist satisfaction. The study of Bigne, Sanchez, and Snachez (2001) examined the relationship between destination image and tourist behavior by using satisfaction as mediating variable. The results showed a direct positive path between destination image and tourist revisiting intentions and recommendations to others. Moreover, this finding found the mediating impact of satisfaction on the relationship between destination image and behavioral intention of revisit and recommendations. The study of Hui, Wan, and Ho (2007) showed that satisfied travelers were willing to recommend the same destination to their relatives and friends, and they were willing to revisit it again the future. In other words, satisfied travelers have a higher probability of choosing the destination again, and he/she is more likely to engage in positive recommendations to others.

Perceived Risk: The Moderating Function

Perceived risk is defined in terms of uncertainty and consequences; perceived risk increases with higher levels of uncertainty and/or the chance of greater associated negative consequences (Oglethorpe and Monroe, 1987). Perception of risk is a key factor that influences travelers to make their travel decisions (Law, 2006; Sonmez and Graefe, 1998) and traveler behaviors such as referrals and brand loyalty (Erdem, 1998).

Law (2006) investigated three risk factors (infectious diseases, terrorist attacks, and natural disasters) that influence the perception of international travelers in making travel decisions. Travelers would prefer to visit destinations with low potential risks and where the perceived magnitude to threat of risks was not high in the destinations. Kozak, Crotts, and Law (2007) examined the impact of risks related to safety (e.g. health) and security (e.g. natural disasters) over destination choices of travelers. South America, Africa, the Middle East, and Asia were perceived to be riskier places for the threat of infectious disease. North America was riskier for terrorist acts while Asia and North America were perceived riskier with natural disasters. Travelers who were concerned about terrorism as a risk would avoid traveling in the Middle East (Sonmez and Graede, 1998), and travelers who feared health-related risks (e.g. HIV) would not travel in Africa (Lepp and Gibson, 2003).

Perceived risk as a moderator variable can be described when such effect occurs. For example, travelers who had less perception on risk were likely to revisit or recommend the destination to relatives and friends rather than the high-perceived risk travelers were (Chaudhuri, 2000). Campbell and Goodstein (2001) proposed the moderating effect of perceived risk on consumers' evaluations of product. This study showed that high perceived

risk leads consumers to become more conservative; in contrast, when the perception of risk is low, consumers will enjoy the positive stimulation and will evaluate products more positively.

Based on the above literature review, the research hypotheses and the conceptual model of this study are:

H₁₋₁: The quality of accommodations and restaurants would exert a positive overall satisfaction;

H₁₋₂: The convenience of traveling would exert a positive overall satisfaction;

H₁₋₃: The attractions of cultural and natural beauty would exert a positive overall satisfaction;

H₁₋₄: The ease of local facilities would exert the positive overall satisfaction;

H₁₋₅: The variety of shopping facilities would exert a positive overall satisfaction;

H₂: Tourists who have a positive overall satisfaction are more likely to revisit Thailand in the future;

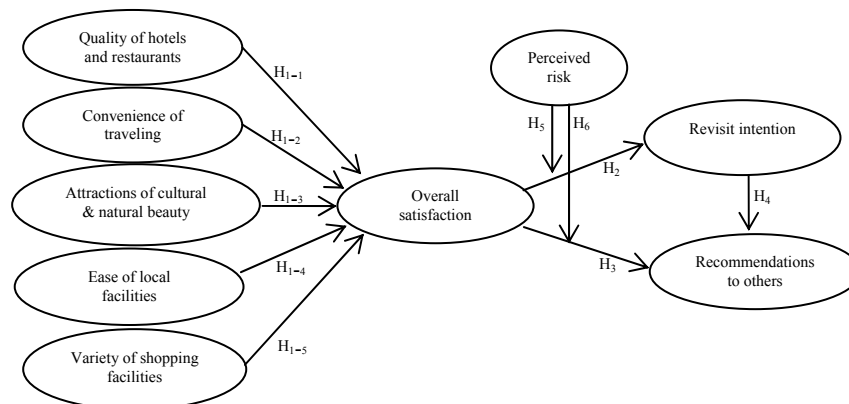
H₃: Tourists who have a positive overall satisfaction are more likely to recommend Thailand to others;

H₄: Tourists who have intention to revisit are more likely to recommend to others;

H₅: The positive influence of overall satisfaction on revisiting intention would be greater for low-perceived risk travelers than for high-perceived risk travelers; and

H₆: The positive influence of overall satisfaction on recommendations to others would be greater for low-perceived risk travelers than for high-perceived risk travelers.

Figure 1
The Conceptual Model



METHODOLOGY

Research Design and Instrument

This study employed causal and descriptive research designs to determine the cause-and-effect relationships among constructs. A survey questionnaire was adapted to assess the destination image perceptions from the studies of Jenkins (1999) and Rittichainuwat et al. (2001). A 7-point Likert type scale was used to measure each statement of overall satisfaction, revisit intention, and recommendations to others at 1 = strongly disagree through 7 = strongly agree (Castro et al., 2007; Lee et al., 2007; Bigne, et al., 2001; Kozak and Rimmington, 2000). For perceived risk items, respondents were asked their perception of risks related to SARS, Tsunami, bird flu, and political incidents. A 7-point Likert type scale was used from 1 = low risk to 7 = high risk. However, no significant impact was found on the relationship between overall satisfaction and behavioral intention on bird flu and political risks. Therefore, only SARS and the tsunami disasters were investigated in this study. Lastly, the participant demographic characteristics such as gender, age, and country of origin were collected.

A pilot questionnaire was given to a focus group of seventeen graduate students who have visited Thailand in the last two years to investigate its reliability and validity. Some question items were eliminated and revised for clarity. The pretest identified the reliability of the questionnaire as a range from .76 to .84 (Hair, Black, Babin, Anderson, and Tatham, 2005).

Sampling Plan and Data Analysis

The population of this study is tourists who visited Thailand between January to December 2005, after SARS and the tsunami occurred. The method of sample selection was systematic random sampling. Every tenth person waiting at major local destination check-in counters at the Domestic Airport in Bangkok, Thailand was

selected to participate in this study. In case, the respondents could not participate in this survey (e.g. respondents are under 18 years old or had language barriers), the next person was selected for participation. The survey was conducted from October 1 to 31, 2006. Out of 358 questionnaires distributed, 303 were collected indicating a response rate of 84.6%. With 301 usable sample sizes and 20 indicators of exogenous and endogenous variables, the sample size met the ratio of the number of cases to the number of free parameters (15:1). This acceptable ratio could indicate the statistical precision of the results (Kline, 2005).

Descriptive statistics were utilized to analyze respondents' demographic characteristics such as gender, age, and nationality. The confirmatory factor analysis was used to investigate the measurement items and goodness of fit of the data. The average value means of two items (SARS and the tsunami) were used to separate samples into two groups—low- and high-perceived risks. Lastly, Structural Equation Modeling (SEM) was used to test the model fit and explain the causal relationships among constructs and the moderating effect of perceived risk variables on the relationship between overall satisfaction and behavioral intention (Joreskog and Sorbom, 2006).

RESULTS

Respondent Demographic Characteristics

Approximately 58% of respondents were male (174) and 42% were female (127). Most travelers were between 20-39 years of age (78.4%) and 40-59 years of age (15.6%). Geographical locations indicated that 48.5% (146) of tourists were from Europe (e.g. England, Germany, and France), 15% (45) from North America (e.g. USA and Canada), and 13% (39) from Asia (e.g. Singapore, Japan, and Korea). About 50.5% of travelers (152) indicated that it was their first time visiting Thailand, and 58% (174) spent more than 7 days in Thailand. Most travelers visited Thailand for leisure purposes (72.4%).

Destination Image Dimensions

Before testing the hypothesized relationships in the structural model, the scales used to operationalize the constructs were examined through the estimation of a measurement model. The confirmatory factor analysis was applied to test the model fit of the measurement model. Five exogenous variables were quality of accommodation and restaurants, convenience of traveling, attraction of cultural and natural beauty, ease of local facilities, and variety of shopping facilities. Items of 'overall satisfaction', 'revisit intention', and 'recommendations to others' were presented as endogenous variables.

Eight constructs tested the goodness of fit and validation of scales for the measurement of these constructs by the confirmatory factor analysis. Table 1 presents standardized loadings and *t*-value of each indicator. All indicators had significant standardized loadings at $p \leq .05$ and *t*-values of the individual indicators ranged from 11.09 to 19.61 for all data set. The composite reliabilities indicated internal consistency, meaning that the measures all consistently represent the same latent construct. The composite construct reliability of each construct ranged from .74 to .89. The variance-extracted estimate was used to measure the amount of variance captured by a construct in relation to the variance due to random measurement error. The variance-extracted scores of constructs ranged from .50 to .83, which are suggested adequate convergent validity (Fornell and Larcker, 1981; Hair et al., 2005).

Discriminant validity compares the variance-extracted estimates of the measurements with the square of the parameter estimate between the measurements. If the variance-extracted estimates of the constructs are greater than the square of the correlation between two constructs, evidence of discriminant validity exists (Fornell and Larcker, 1981). For example, the average variance-extracted estimate of attraction of cultural and natural beauty was .64 and of ease of local facilities was .51 (see Table 1). These two variance-extracted estimates were greater than the square of the correlation between attractions of cultural and natural beauty and ease of local facilities ($\Phi = .60$, $\Phi^2 = .36$). Other variable comparisons also meet the criteria of discriminant validity. Therefore, these variables supported the discriminant validity of constructs.

The measurement model results supported the validity of measures, with strong loadings for all observed variables, and acceptable overall model fit (see Table 1). The chi-square (χ^2) value=328.78, degree of freedom (df)=145 ($p \leq .00$), Root Mean Square Error of Approximation (RMSEA)=.064, Comparative Fit Index (CFI)=.98, and nonnormed fit index (NNFI)=.98. These indices met the accepted criteria for the overall model fit of each sample group suggested by Hair et al. (2005).

Table 1
The Measurement Model Properties

	Factor Loadings (<i>t</i> -value)	Average Variance Extracted	Composite Reliability
<i>Quality of hotels and restaurants</i>		.63	.89
Service at hotels	.80 (16.35)		
Services at restaurants	.80 (16.21)		
Quality of food	.80 (16.29)		
Quality of hotels	.80 (16.14)		
Varieties of food	.76 (15.20)		
<i>Convenience of traveling</i>		.50	.78
VISA procedure	.63 (11.47)		
Currency exchange services	.84 (16.79)		
Efficient local transportation	.62 (11.09)		
Low transportation costs	.72 (13.49)		
<i>Attractions of cultural & natural beauty</i>		.64	.84
Beautiful architecture	.73 (14.03)		
Rich customs and culture	.83 (16.93)		
Natural beauty	.84 (17.15)		
<i>Ease of local facilities</i>		.51	.74
Organized infrastructure	.67 (12.09)		
Quality of recreation facilities	.76 (14.08)		
Modern medical facilities	.72 (13.12)		
<i>Variety of shopping facilities</i>		.80	.89
Variety of shopping centers	.90 (18.99)		
Convenient shopping locations	.89 (18.71)		
<i>Overall satisfaction</i>	.91 (19.61)	.82	.82
<i>Revisit intention</i>	.91 (19.60)	.83	.83
<i>Recommendations to others</i>	.90 (19.60)	.80	.80

Correlation Matrix	Mean	S.D	1	2	3	4	5	6	7
1. Quality of hotels and restaurants	5.28	1.43							
2. Convenience of traveling	5.21	1.48	.65						
3. Attractions of cultural & natural beauty	5.47	1.38	.72	.70					
4. Ease of local facilities	4.57	1.28	.67	.62	.60				
5. Variety of shopping facilities	5.49	1.42	.72	.64	.66	.68			
6. Overall satisfaction	5.76	.95	.56	.52	.60	.43	.44		
7. Revisit intention	5.99	.97	.29	.23	.29	.18	.25	.65	
8. Recommendations to others	6.16	.90	.44	.41	.56	.30	.40	.79	.80

χ^2 (df)=328.78 (df=145), p -value=0.00, CFI=.98, NNFI=.98, RMSEA=.064, S.D. = Standard deviation

Table 2
Structural Path Estimates

Path Coefficients	Standardized Loading (<i>t</i> -value)	Hypotheses
QHR \rightarrow OS (γ_1)	0.29 (2.07*)	H ₁₋₁ : Supported
CT \rightarrow OS (γ_2)	0.05 (0.43)	H ₁₋₂ : Not Supported
CN \rightarrow OS (γ_3)	0.43 (4.07**)	H ₁₋₃ : Supported
LF \rightarrow OS (γ_4)	-0.08 (-0.58)	H ₁₋₄ : Not Supported
SF \rightarrow OS (γ_5)	-0.03 (-0.27)	H ₁₋₅ : Not Supported
OS \rightarrow RI (β_1)	0.52 (10.23**)	H ₂ : Supported
OS \rightarrow RE (β_2)	0.52 (7.45**)	H ₃ : Supported
RI \rightarrow RE (β_3)	0.47 (7.04**)	H ₄ : Supported

Model Fit Indices: $\chi^2 = 348.38$ (df=155, p =0.00), GFI=.90, NNFI=.98, CFI=.98, RMSEA=.063.

* $p < .05$, ** $p < .01$, QHR=quality of hotels and restaurants; CT=convenience of traveling; CN=attractions of cultural & natural beauty; LF=ease of local facilities; SF=variety of shopping facilities; OS=overall satisfaction; PR=perceived risk; RI=revisit intention; and RE=recommendations to others

Perceived Destination Image and Behavioral Intention

The structural paths were estimated to test the hypotheses between constructs. Table 2 presents the structural model fit the data with $\chi^2 = 348.38$ (df=155, p -value=0.00), GFI=.90, NNFI=.98, CFI=.98, RMSEA=.063. The results indicated the effect of quality of hotel and restaurants on overall satisfaction was positive and significant

($\gamma_1 = .29$, $p\text{-value} \leq .05$), which supported H_{1-1} . Attractions of cultural and natural beauty had a positive effect on overall satisfaction ($\gamma_1 = .43$, $p\text{-value} \leq .01$), hence H_{1-3} was supported. In contrast, the effect of convenience of traveling, ease of local facilities, and variety of shopping facilities were not significant to overall satisfaction, which did not support H_{1-2} , H_{1-4} , and H_{1-5} , respectively. The results further showed that the effect of overall satisfaction on the intention to revisit was positive and significant ($\beta_1 = .52$, $p\text{-value} \leq .01$), which supported H_2 . Overall satisfaction also had a positive effect on giving recommendations to others ($\beta_2 = .52$, $p\text{-value} \leq .01$), which supported H_3 . Lastly, the influence of the revisiting intention on recommending to others was positive and significant ($\beta_3 = .47$, $p\text{-value} \leq .01$), which supported H_4 .

The Effect of Perceived Risk Level

Table 3 showed the Structural Equation Model (SEM) to investigate the moderating effect of perceived risk on the relationship of overall satisfaction and behavioral intention. The sample was split at the mean (3.09) of member's perceived risk of SARS and the tsunami into low- and high-perceived risk groups. The moderator effect is tested by taking the difference in two χ^2 values with the free model (M_f) and two constrained models (M_{c1} and M_{c2}) (Sauer and Dick, 1993). The potential difference in the slope estimate is present when the change in the χ^2 value is significant (Simonin, 1999).

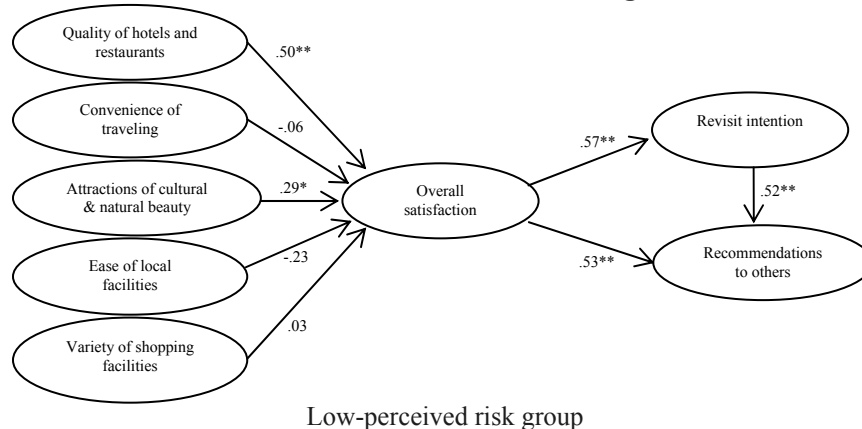
Table 3
The Chi-square Difference Test of Perceived Risk Moderating Effect

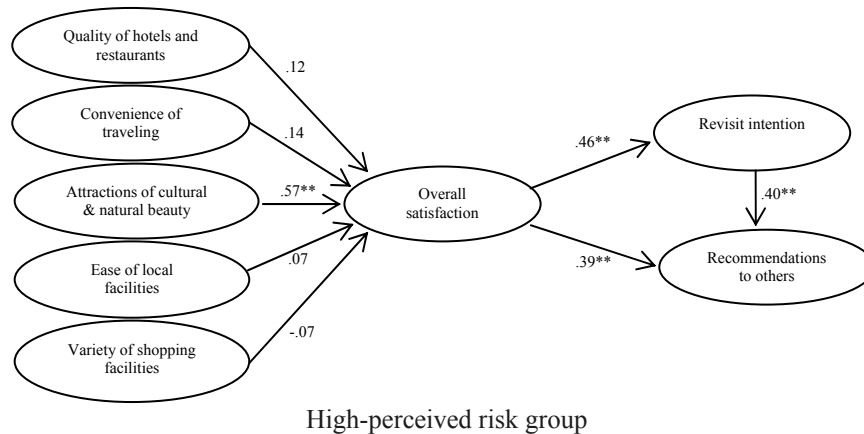
Model	Chi-square Statistics		Chi-square Difference
M_f : Free Model	640.84 (df=348), $p = .00$		
M_{c1} : Overall satisfaction \rightarrow Revisit intention	644.89 (df=349), $p = .00$	$M_{c1} - M_f$	$\Delta\chi^2 = 4.05$, df=1, $p < .05$
M_{c2} : Overall satisfaction \rightarrow Recommendations	646.07 (df=349), $p = .00$	$M_{c2} - M_f$	$\Delta\chi^2 = 5.23$, df=1, $p < .05$

For overall satisfaction and revisit intention path, the free model (M_f) showed $\chi^2 = 640.84$ with df=348 and $p < .001$ and the constrained model (M_{c1} : overall satisfaction and revisit intention) yielded $\chi^2 = 644.89$ with df=349. The χ^2 difference of these two models was =4.05 (644.89-640.84=4.05) with df=1 (349-348=1), which was significant. This result supported H_5 : the influence of overall satisfaction on the intention to revisit was greater in low-perceived risk travelers ($\beta_{1-low} = .57$, $p\text{-value} \leq .01$) than high-perceived risk travelers ($\beta_{1-high} = .46$, $p\text{-value} \leq .01$), see Figure 2.

The SEM model is estimated in which one path was constrained to be equal in two groups (overall satisfaction and recommendation to others). This constrained model (M_{c2}) showed $\chi^2 = 646.07$ with df=349. The χ^2 difference between free model (M_f) and constrained model (M_{c2}) was 5.23 (646.07-640.84=5.23) with df=1 (349-348=1), which was significant and supported H_6 . The influence of overall satisfaction on giving recommendations to others was also greater in low-perceived risk travelers ($\beta_{2-low} = .53$, $p\text{-value} \leq .01$) than in high-perceived risk travelers ($\beta_{2-high} = .39$, $p\text{-value} \leq .01$).

Figure 2
The Standardized Parameter Coefficients for Low and High Perceived Risk Groups





CONCLUSIONS AND MANAGERIAL IMPLICATIONS

Destination image is a key antecedent of travelers' satisfaction and behavioral intention. The results found that 'quality of hotels and restaurants' and 'attraction of cultural and natural beauty' were significant variables influencing overall satisfaction. The results supported the previous studies of Ibrahim and Gill (2005), Rittichainuwat et al. (2001), and Yau and Chan (1990). Positive images of high quality accommodations and restaurants included with services at hotels and restaurants were taken into account for overall satisfaction. Each destination can increase travelers' perception of the quality of accommodations and restaurants with a reasonable amount of money spent and with a variety of hotel and restaurant choices. These can accommodate for unique cultural and natural beauty of Thailand, while the neighboring countries such as Singapore lack the local culture items and natural and scenic beauty (Hui and Wan, 2003). By combining these two strengths of the Thai destination image, Thailand can come up with the competitive marketing campaigns, which can bring back travelers and, at the same time, create new market to the destination. Meanwhile, overall satisfaction influences revisit intentions and recommendations to others. Therefore, expecting travelers' future behaviors, revisiting and referrals, is required to satisfy travelers' expectations of traveling. It could be either in providing satisfying services or a perceived value of money and time to visit. Promoting travel campaign with repeat travelers can reduce advertising costs because these travelers already know about destinations. Moreover, these market segments can be more predictable in their future behavior than potential travelers. Using the media as a more effective and reputable channel of information distribution can be a tool for bringing back travelers.

This study provided evidence that low-perceived risk travelers had a tendency toward revisit intention and recommendations to others. This result supported the study of Law (2006) that low-perceived risk travelers would prefer traveling than high-perceived risk travelers would. Perceived risk becomes the barrier for travelers' future action. Travelers who have low-perceived risk had more potential on revisit intentions and recommendations to others than high-perceived risk travelers. Besides the risks of natural disasters, destinations may also consider other risks that might relate with considerations for traveling. For example, travel agents can promote special promotional campaigns with reasonable packages, which would be worth time and money for travelers. This can decrease the perception of risk on time and money. Moreover, some publicity and advertising should clarify the safety of travel and natural disasters, diseases, and terrorism, for instance, and show the increased transparency of information and introduce surveillance systems (Law, 2006). These can help destinations recover the damages of the past and reduce the travelers' perception on risk. Coordination with travel agencies abroad and special tourism campaigns may be required to persuade travelers to visit or revisit. Promoting marketing campaigns with repeat travelers could be more effective than with first time travelers. This is due to the fact that repeat travelers are likely to have less perceived risks than first time travelers (Lepp and Gibson, 2003).

Limitations and Future Research

This study has a few limitations. Firstly, this study was conducted in winter at Bangkok airport. Thus, the respondents' views might be different if they travel in other seasons. Secondly, this study investigated destination image perception from tourist's perspectives. Future research can examine the travel agents' or tour operators' points of view. These groups have an influence on perceived image of a particular destination because they have influence on enhancing tour packaging and marketing campaigns.

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NUTRITION INTERVENTIONS AND OLDER POPULATIONS: DO THEY HAVE AN IMPACT?

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ABSTRACT

To assist socio-economically disadvantaged individuals with improving their health-related ideals and practices, congregate meal sites were designed. When older individuals visit congregate meal sites, they are “forced” to practice proper dietary behaviors because the meals provided are nutrient dense. However, their ability to manage their own diets and their receptiveness to nutrition information is unknown. This study found that while congregate meal site participants are aware of health expert nutrition recommendations; they are not able to apply these suggestions to their diets. Short term nutrition interventions did not increase nutrition knowledge or improve the ability to manage chronic conditions.

Key Words: nutrition intervention, elderly, congregate meals, socialization

INTRODUCTION

Providing members of elderly populations with nutrition interventions that help to prevent the decline of health, restore and maintain function, and increase quality of life has proven to be quite complex. Barr et al. (2000) Bernstein et al. (2002), and Kretser, Voss, Kerr, Cavadini, and Friedmann, (2003) have found that not only is the information presented in the nutrition interventions important, but properly designing the intervention for the group the information is presented to has a huge impact on whether there is benefit for the participants. Given the heterogeneity of older populations, generic nutrition interventions do not have relevance for large portions of the older population which severely limits their effectiveness (Kretser, Voss et al. 2003).

Currently, health promotion strategies that include nutrition interventions focus on changing attitudes and improving nutrition knowledge in the hope that it will influence positive dietary behaviors (Administration on Aging 2005; Department of Health and Human Services 2005). Previously, the effects of nutrition interventions on older populations have been inconclusive (Rodgers, Kessler et al. 1994; Nyaga 2000). This inconsistency is potentially because nutrition interventions that were designed and shown to be effective for the mainstream population were used in older populations without ensuring that the older individuals understood the terminology used in the nutrition intervention.

Policy makers are especially concerned about the nutrition intake of the older population; particularly those with lower socioeconomic status because they are unlikely to practice proper dietary behaviors nor exercise the recommended amount. These practices in addition to poor health conditions may contribute to overall reduced health. Poor diets have been linked to premature frailty and difficulty performing the normal activities of daily living (Nourhashémi, Andrieu, Gillette-Guyonnet, Vellas, Albarede, & Grandjean, 2001). Payette and Shatenstein (2005) reported that as people age, their diets lack the balance necessary to meet energy and nutrient requirements. The decline in food intake with age also decreases dietary variety and is associated with decreased quality of life and poor health status (Morely 2001; Kwon, Suzuki et al. 2006). Inadequate diets put older people at risk for chronic diseases and disease-related disabilities, decrease food choice flexibility and overall quality of life, and hasten the loss of independence (Sharpe, Huston et al. 2003; Payette and Shatenstein 2005). Risk factors for inadequate nutrition are poor health status, low income, lack of access to resources, and other characteristics of households and

communities where they live (Anderson 1990; McDonald, Quandt et al. 2000). The decrease in physical activity that accompanies aging increases the importance of proper diet and nutrition (Chao and Dwyer 2004). The reduction in physical activity and change in body composition increase the importance of the quality or nutrient density of the foods elderly people consume because calorie needs are lower (Haller, 1999; Leite, Nicolosi, Cristina, Hauser, & Pugliese, 2003). As a result, highly nutritious food choices may be more important for older Americans. Unfortunately, although the elderly have been shown to understand they need to eat a proper diet, they do not know what constitutes a proper diet (Lilley and Johnson 1996).

The true potential for effective intervention in older individuals and its impact on their knowledge, attitudes, beliefs, and behavioral intentions has not been realized. Older people were previously excluded from lifestyle studies and little was known about the foods they eat and the attitudes and beliefs that influence these choices (Lilley and Johnson 1996). The ineffectiveness of nutrition interventions on the improvement of nutrition knowledge in older populations may be due to the fact that many nutrition interventions have not been designed specifically for elderly populations, and the information may not have been received as intended.

LITERATURE REVIEW

Congregate Meal Sites

In 1965, the Older Americans Act created the Administration on Aging. The purpose of the Administration on Aging has been to allocate funds to Area Agencies on Aging to provide nutrition assistance to eligible individuals. According to the amended Older Americans Act (2000), qualified individuals must:

- 1) be 60 years of age or older to qualify for services in general;
- 2) be a caregiver of someone 60 years of age or older or an older individual caring for a child 18 years of age or younger to qualify for Family Caregiver Supports;
- 3) be 55 years of age or older and have an adjusted income at or below 125% of the Federal Poverty Level to qualify for Older Worker Employment Services; and
- 4) be in the greatest social or economical need, with a special focus on low-income minority individuals and individuals living in rural areas.

Although rural elderly people qualify for government sponsored nutrition programs such as congregate meals sites by being 60 years of age and older, participation in such programs is low for the following reasons: 1) meal sites are located in areas where the eligible elderly population is not dense, 2) older people need private transportation to get to some meal sites because of lack of public transportation (McDonald, Quandt et al. 2000), 3) rugged terrains make it difficult for some elderly people to reach the services (Krout 1994; Quandt and Rao 1999; Li 2006), and 4) many elderly people may not be aware of the services. Participation in congregate meal programs has been specifically shown to enhance 1) daily nutrient intake, 2) nutrition status, 3) amount of social interactions, and 4) functionality of older adults (Wellman & Kamp, 2004).

Designing Nutrition Interventions

Spillman and Kemper (2004) have suggested that people attempting to help the elderly understand the complications related to their health conditions and the causes of the conditions should identify threats to healthy aging, provide appropriate interventions, and properly measure the scope of the intervention's impact. In other words, intervention designers should be realistic about the potential impact of providing the nutrition information and recommendations for the given population. Hermann, Brown, and Henitz (2000) showed that dietary recommendations that are understandable and achievable helped to foster desired improvements in dietary behaviors, dietary intake, and health measures. Meeting the needs of the elderly population means taking into account the heterogeneity of the population (Dinkins and Walker 1996). Nutrition intervention designers want to ensure that they are suggesting changes that will eliminate food items detrimental to the health of intervention participants; however, designers should be cautious of negative nutrition impacts if recommendations result in decreased food consumption for these nutritionally at-risk individuals (Leite, Nicolosi et al. 2003).

Fischer et. al. (1991) found that a properly designed nutrition intervention should 1) be tailored to the audience, 2) strongly emphasize the benefits of good nutrition, 3) provide practical measures that help participants to change, and 4) present achievable goals to elicit participation. In conjunction with these recommendations, Taylor-Davis et. al. (2000) suggested that simplifying materials would improve the effectiveness of the nutrition

intervention. Simplification includes applying the adult learning theory to the information which requires the use of concrete rather than abstract terms, highlighting important information with easy-to-read print, shaded boxes, and color along with introducing new concepts with analogies and common associations (Taylor-Davis, Smiciklas-Wright et al. 2000). These methods included combinations of verbal presentations, written handout materials, and video tapes.

When designing interventions for older adults, researchers warn that an overwhelming amount of confusing information regarding diet and disease would be largely ineffective when attempting to change any preexisting attitudes or behaviors towards nutrition (Hudnall and Wellman 1992; Campbell, Demark-Wahnefried et al. 1999; Hermann, Brown et al. 2000; Miller, Edwards et al. 2002). This confusion would lead to either the participants' inability to properly interpret the material or a disregard for the information. Miller (2002) also found that knowledge about the relationship between food choice and health outcomes had a positive effect on the ability of the elderly compliance. The main purposes of the study were to examine the effect of nutrition intervention on congregate meal site participants' nutrition knowledge and determine congregate meal site participants' potential for being able to manage their diets.

METHODOLOGY

Design of the Baseline Survey Instrument

The materials for this study were all designed by the researcher with assistance from other researchers, nutrition experts, and industry professionals. The process began with an interview of Elaine Brovont, Executive Director of Midland Meals, Inc. (and current president of the National Association of Nutrition and Aging Services Programs) to gain a perspective of the major issues with the congregate meals program to design an instrument that addressed the concerns of the congregate meal site service providers. Midland Meals, Inc. prepares and distributes 7,760 congregate meal site and 4,221 Meals on Wheels meals for participants in 16 areas and over 80 counties across the State of Indiana.

One of the concerns of the congregate meal service providers was whether congregate meal site participants were capable of managing their diets and would apply dietary and activity suggestions designed to assist them with combating potential chronic conditions to their current health management practices. The instrument for this study was designed to determine the aforementioned diet management capability and effectiveness of nutrition interventions on the knowledge level and ability to manage diets in the congregate meal site population.

The survey instrument was adapted from research conducted by Parmenter and Wardle (1999) titled, "Development of a General Nutrition Knowledge Questionnaire for Adults." Parmenter and Wardle (1999) developed questions that measured general nutrition knowledge, the ability of participants to link diet and disease, and the ability to identify the nutrition content of food items. Parmenter and Wardle's (1999) questionnaire was piloted to assess construct validity and test-retest reliability resulting in a sufficient internal consistency of each section (Cronbach's $\alpha=0.70-0.97$) and test-retest reliability for their instrument well above the minimum requirement of 0.70.

Intervention Design

The participants in this study were exposed to a twenty day nutrition intervention period. Each week for one month the study participants were provided with information about 1) the nature of a chronic disease, 2) the recommended food items aimed at improving or preventing cancer, heart disease, and diabetes, and 3) recommended physical activities. The four chronic ailments selected for this study were Type II diabetes, cancer, obesity, and heart disease because of the high prevalence of such diseases among the elderly population and the restrictions these illnesses place on the diets of that age group.

Given the heterogeneity of the older population and the likelihood that there would be different interpretations of terminology and statements in the survey instrument and nutrition intervention by the designers and the participants, cognitive interviews were conducted. The cognitive interviews helped the researchers to reduce the amount of information provided in the instruments, simplify the language, enlarge and bold the print, and increase the overall appearance.

Data Collection and Intervention Period

The present research used the test-retest method to determine the effectiveness of nutrition intervention in the state of Indiana's congregate meal site populations. Prior to the distribution of surveys and nutrition interventions, a meeting was held with all participating meal sites directors. Directors were introduced to all of the instruments to be used in the study, how to distribute and collect them, and their role in assisting the participants during the study. The baseline surveys were distributed to congregate meal site participants in Areas I and IV. The procedure for the collection of data and distribution of interventions included 1) the baseline survey distribution and collection, 2) the twenty days of nutrition intervention exposure, and 3) the post intervention distribution and collection. The sites used in the study had similar demographics to that of the state as determined by the nutrition assessment performed in 2006.

Data in this study were analyzed using SPSS version 15.0 and Microsoft Excel 2003. Microsoft Excel 2003 was used for data entry. SPSS version 15.0 was used to conduct t-tests, means, standard deviations, and generate other descriptive statistics. SPSS was also used to create factors and test the reliability of the factors.

RESULTS

A total of 78.3% (432 out of 552) of the individuals solicited actually participated in the survey. Respondents' ages ranged from 52 to 98 with 36.7% falling between the ages of 60 to 74 and 60.7% reported being 75 years of age and older. With regards to gender 75.5% (276) were female. Caucasians comprised 85.1% of the respondents in this study accounting for 349 of 410 respondents. The only other group representing any magnitude was Black or African Americans at 12.9% (53 respondents). A total of 306 of the 405 (75.6%) respondents attended high school (9th to 12th grade). Approximately 8.1% of the respondents (33) had an 8th grade education or less. These findings are consistent with data from the Elderly Nutrition Services Nutrition Needs Assessment (2006) survey.

Post Intervention Demographics

Fifty-four percent (235) of the 432 congregate meal site participant respondents in survey 1 participated in the second round of the survey. Of these 235 respondents, 79.6% (187) indicated that they participated in the one month nutrition intervention and were therefore used in the nutrition intervention analysis. Respondents' ages ranged from 52 to 94. Again approximately a third, or 33.7% were between the ages of 60 to 74 and 64.0% of the participants were 75 years of age and older. Only 2.3% were below the age of 60. With regards to gender 77.0% (141) were female. Caucasians comprised 97.8% of the respondents in this study accounting for 176 of the 180 respondents. A total of 136 of the 178 (76.4%) respondents attended high school (9th to 12th grade). Approximately 6.2% (11) of the respondents had an 8th grade education or less.

Nutrition Intervention Usage

Fifty-four percent (235) of the 432 congregate meal site participants that responded in the baseline survey participated in the post intervention survey. Of these 235 respondents, 79.6% (187) indicated that they participated in the one month nutrition intervention; however, only 60.4% (142) indicated the frequency with which they participated. Approximately 22.6% (53) of the respondents did not respond to the question of how often they consulted the nutrition intervention. Approximately thirty-nine percent (91) of the participants consulted the intervention one to five times, 9.8% (23) consulted the nutrition intervention six to ten times, 4.7% (11) consulted the nutrition intervention eleven to fifteen times, and 7.2% (17) consulted the nutrition intervention sixteen to twenty times. On average, the congregate meal site participants consulted the intervention one to five times during the month.

Total Knowledge of Health Expert Recommendations

To determine respondents' general nutrition awareness, the following question was asked: *"Do you think health experts recommend that the average American should be eating more or less of these foods?"* Respondents were given seven food types: vegetables, sugary foods, meat, fatty foods, high fiber foods, fruit, and salty foods and had the option of choosing yes, no, or not sure. On average respondents answered 6.20 of the seven questions correctly. Eighty-four percent (352) of the 419 respondents correctly matched at least six of the seven statements to the correct recommendation. More than ninety percent of the respondents showed basic nutrition awareness with regards to the proper consumption of vegetables (95.6%), sugary foods (94.4%), fatty foods (91.8%), fiber (90.6%), fruit (95.7%), and salty foods (93.8%). Participants had a particular problem identifying expert recommendations

regarding meat (59.7%). Exposure to the nutrition intervention did not improve participants' ability to identify expert recommendations regarding meat (57.5%). This shows that respondents in this study understood health expert recommendations prior to the nutrition intervention and there was not much room for improvement. Table 1 shows a comparison of individuals participating in both the baseline and post intervention survey regarding knowledge of health expert recommendations.

Table 1
Comparison of Individuals Participating in Both the Baseline and Post Intervention Survey Regarding Knowledge of Health Expert Recommendations

	Round 1			Round 2		
	Total			Total		
	<i>f</i>	<i>n</i>	%	<i>f</i>	<i>n</i>	%
Vegetables	178	185	96.2	182	178	97.8
Sugary Foods	175	183	95.6	182	176	96.7
Meat	102	185	55.1	181	104	57.5
Fatty Foods	173	185	93.5	182	172	94.5
High Fiber Foods	168	184	91.3	182	165	90.7
Fruit	178	184	96.7	181	177	97.8
Salty Foods	176	185	95.1	180	176	97.8

f Number of correct responses

n Number of respondents

After the nutrition intervention, participants were asked the same questions regarding health expert recommendations. The nutrition intervention did not make a significant difference in the congregate meal site participants' knowledge of nutrition recommendations. Table 2 shows the mean, standard deviation, degrees of freedom, t-score, and significance level for the respondents' baseline and post-intervention knowledge of health expert recommendations.

Table 2
Comparison of Congregate Meal Site Participants Knowledge of Health Expert Recommendations (paired t-test) Baseline vs. Post Intervention

	Mean	Std. deviation	t	df	Sig. (2-tailed)
Vegetables	-0.017	0.247	-0.904	180	0.367
Sugar	-0.011	0.280	-0.533	178	0.594
Meat	-0.028	0.573	-0.650	179	0.517
Fat	-0.011	0.333	-0.446	180	0.656
Fiber	0.006	0.343	0.218	178	0.828
Fruit	-0.011	0.237	-0.631	177	0.529
Salt	-0.028	0.247	-1.513	178	0.132

Analysis shows that the amount of exposure the congregate meal site participants had to the nutrition intervention did not have an effect on their ability to pair appropriate dietary behaviors with chronic conditions. The mean for individuals that participated 16 to 20 times was 6.647 out of 7; whereas, individuals who participated 1 to 5 times had a mean score of 6.246. Although the mean for individuals that had more exposure was higher the difference among the means was not significant. Table 3 shows the results of an ANOVA and Tukey's Significant Difference test.

Table 3
Knowledge of Expert Recommendations Based on the
Frequency of Intervention Usage

* Intervention Usage	n	#Mean	Std. Dev
0	20	6.15	0.875
1-5	114	6.25	0.965
6-10	22	6.18	0.853
11-15	10	6.40	0.699
16-20	17	6.65	0.702
Total	183	6.27	0.909
Significance			.446

* Amount of exposure to nutrition intervention (in days)

Average number of correct responses based on exposure (0 to 7)

n Number of individuals participating at given usage level

Knowledge of Beneficial Dietary Behaviors

To determine whether the congregate meal site participants understood which dietary precautions help to protect against or assist with the maintenance of chronic conditions, congregate meal site participants were asked to pair statements about popular doctor recommendations to specific chronic diseases. Respondents were asked to mark yes, no, or not sure when matching the statements eating more fiber, eating less sugar, eating less fat, eating less salt, and eating more fruits and vegetables with the chronic conditions with which they may help to reduce the prevalence of affliction or to improve the status. Table 4 shows the results of the baseline and post-intervention performance of congregate meal site participants pairing beneficial dietary behaviors specific chronic conditions.

Table 4
Baseline and Post-Intervention Results Concerning Knowledge of Beneficial Dietary
Behaviors for Specific Chronic Conditions

	Round 1			Round 2		
	Total			Total		
Cancer						
% Correct	<i>f</i>	n	%	<i>f</i>	n	%
Eating more fiber	4	185	2.2	11	182	6.0
Eating less sugar	35	185	18.9	40	181	22.1
Eating less fat	19	184	10.3	33	181	18.2
Eating less salt	28	184	15.2	42	181	23.2
Eating more fruits and vegetables	161	184	87.5	165	182	90.7
Heart Disease	Total			Total		
% Correct	<i>f</i>	n	%	<i>f</i>	n	%
Eating more fiber	7	185	3.8	12	182	6.6
Eating less sugar	26	186	14.0	29	182	15.9
Eating less fat	160	186	86.0	146	182	80.2
Eating less salt	159	186	85.5	145	181	80.2
Eating more fruits and vegetables	170	186	91.4	169	181	93.4
Diabetes	Total			Total		
% Correct	<i>f</i>	n	%	<i>f</i>	n	%
Eating more fiber	141	184	76.6	146	181	80.7
Eating less sugar	158	185	85.4	151	182	82.9
Eating less fat	16	185	8.6	24	181	13.3
Eating less salt	25	185	13.5	25	181	13.9
Eating more fruits and vegetables	9	185	4.9	9	181	5.0

f Number of responding marking correct answer

n Total number responding

Table 5 compares the baseline and post-intervention performance of participants concerning their knowledge of beneficial dietary behaviors for specific chronic conditions and shows the mean, standard deviation, degrees of freedom, t-score, and significance level for the comparison of baseline and post intervention knowledge of beneficial dietary behaviors (t-test).

Table 5
Comparison of Baseline and Post-Intervention Results Concerning Knowledge of Beneficial Dietary Behaviors for Specific Chronic Conditions (paired t-test)

	Mean @ Difference	Std. Deviation	t	df	Sig. (2-tailed)
Cancer					
Eating more fiber	-0.039	0.266	-1.957	180	0.052
Eating less sugar	-0.044	0.446	-1.336	179	0.183
Eating less fat	-0.084	0.448	-2.502	178	0.013*
Eating less salt	-0.089	0.500	-2.390	178	0.018*
Eating more fruits and vegetables	-0.034	0.409	-1.096	178	0.275
Heart Disease					
Eating more fiber	-0.028	0.267	-1.390	180	0.166
Eating less sugar	-0.027	0.475	-0.780	181	0.436
Eating less fat	0.066	0.429	2.077	180	0.039*
Eating less salt	0.028	0.710	0.523	180	0.602
Eating more fruits and vegetables	-0.039	0.439	-1.185	180	0.238
Diabetes					
Eating more fiber	-0.050	0.500	-1.345	178	0.180
Eating less sugar	0.022	0.506	0.589	179	0.557
Eating less fat	-0.072	0.529	-1.832	179	0.069
Eating less salt	-0.028	0.564	-0.661	179	0.509
Eating more fruits and vegetables	-0.017	0.402	-0.556	179	0.579

* indicates that the means have a significant difference at a level of $\alpha < .05$

@ difference between baseline and post intervention means

DISCUSSION

This research shows that health promotion strategies have been effective at increasing the awareness of rural elderly individuals in regards to which food types are beneficial or detrimental for their health. Congregate meal site participants were able to correctly identify health experts' recommendations as to whether they should consume more or fewer vegetables, sugar, fat, fiber, fruit and salt; however, they were not able to properly identify health service professionals' suggestions as it relates to meat consumption. After one month of nutrition intervention, congregate meal site participants' still could not discern health service professional advice regarding meat. These results support the findings of Lilley and Johnson (1996) who found that rural elderly adults generally understand health promotion strategies that encourage the consumption of certain beneficial nutrients and discourage harmful dietary behaviors. It also may underscore the need to evaluate carefully nutrition messages to decrease consumption of specific foods as these may not be understood by this at-risk group of individuals

Individuals that were exposed to the nutrition intervention were not able to identify proper dietary behavior more efficiently based on the number of times they consulted the information. This is contrary to Christensen (2004) who hypothesized that the number of contacts an individual has with recommendations for improving chronic conditions was more important than the length of the contact periods. This implied that individuals who participated in the intervention more frequently throughout the intervention period should have benefited more from the intervention regardless of the length of the exposure period. The majority of the individuals in this study only participated in the nutrition intervention one to five days out of the twenty possible days. This may be partially due to the fact that the only incentive that individuals were given for participating in the intervention was to potentially be able to manage their conditions more effectively. It can be assumed that the information provided in the intervention was viewed as a mere show piece or tool for discussion for individuals participating more frequently and that further assistance is needed for these individuals to be able to apply their knowledge to their given situations. Perhaps, the hypotheses that congregate meal site participants would consult nutrition information during

their leisure time was incorrect. Especially since these individuals were not provided with additional incentives to engage the nutrition intervention. It has been found that congregate meal site participants attend mainly for socialization purposes. Rather than paying attention to the nutrition information at the table – this could suggest the need to present the information in a different way, ie. hands-on activities, face-to-face, or other manners that involve social contact (Thomas & Ghiselli, 2007).

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CONCEPTUALIZING THE EFFECTIVENESS OF CONSUMER NARRATIVES FOR DESTINATION MARKETING

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ABSTRACT

Using tourists' stories to promote destinations is believed to be an innovative approach in destination marketing. This study conceptualizes and investigates the effectiveness of such approach based upon the underlying premise that human possesses narrative reasoning with which they can retrieve information better through a story. The results of the study suggest that the increased knowledge of a destination will have a stronger effect to intention to visit the destination if the audiences can identify themselves as similar to the story characters. Several managerial implications are discussed.

Key Words: consumer narratives, eWOM, destination marketing, advertising effectiveness.

INTRODUCTION

The emergence of social media on the internet has led to a surge of interest in the use of consumers' narratives (e.g., consumers' reviews and/or stories) for marketing purposes (Pan, MacLaurin, & Crotts, 2007; Tussyadiah & Fesenmaier, 2007; Wang, Tussyadiah, & Mattila, 2008; Litvin, Goldsmith, & Pan, In Press). Narratives are widely believed to have a potential to be an effective way to market products/services (Anderson, 2007). Indeed, Learned (2007) argued that storytelling, in its many forms, is one of the most powerful tools for presenting the truths of products, services, or brands. Previous research on the use of narratives in the field of advertising has focused on the influence of narrative structure to audiences' information processing (Adaval & Wyer, 1998; Escalas, 2004a; 2004b). Adaval & Wyer (1998) found that consumers tend to favorably evaluate products of which the information is conveyed through narratives (i.e., in thematically and temporally related sequence) instead of merely a list of attributes. This claim is supported by the study of Mattila (2000; 2002). Escalas (2004a; 2004b) introduces the term "mental simulation" in narrative processing, whereby audiences form the cognitive construction of hypothetical scenario based on the chronology (i.e., temporal dimension) and causality (i.e., relational organization) of the story.

In the field of tourism and hospitality, narrative marketing is particularly significant since tourism and hospitality products are characterized with their experiential values. Polkinghorne (1997), Gabriel (2000), and Mattila (2000; 2002) argue that stories are uniquely effective in representing and conveying lived experiences because they offer a logic for the narrators and audiences. Therefore, narrative appeals might be effective in communicating the value of tourism and hospitality as experiential products to audiences (Padgett & Allen, 1997; Mattila, 2000; 2002). Recent studies on consumers' narratives in the context of tourism marketing have focused on the contents of travelers' stories to draw implications to destination marketing (Pan, MacLaurin, & Crotts, 2007; Tussyadiah & Fesenmaier, 2007). Utilizing narrative theory and following the narrative structure analysis proposed by Escalas (2004a; 2004b), Tussyadiah and Fesenmaier (2007) attempted to conceptualize the effectiveness of narrative marketing by extracting the key marketing strategies from blog contents of a DMO website. Unfortunately,

this study does not directly assess the marketing effectiveness of stories. Thus, this study aims to assess the effectiveness of consumers' stories for marketing tourism and hospitality products by analyzing the influence of story comprehension to product evaluation and, more importantly, behavioral intention of audiences. This study seeks to develop a theoretical foundation for narrative marketing in tourism based on conceptual framework formulation and empirical analysis. Furthermore, this study also draws some managerial implications for DMOs and other tourism and hospitality businesses.

MARKETING THROUGH NARRATIVES

Narrative, and the act of narrating, has been a subject of research across different disciplines. Most of such research came to a common belief that narrative is the most effective device to understand human experience. Several scholars have attempted to define the term narrative, particularly in verbal context, in contrast with other form of (non-narrative) verbal/text. In the attempt to conceptualize the definition of narrative, most scholars focus on its structure and features (i.e., what constitutes a narrative). One of the widely appraised descriptions of narrative structure is the concept of "narrative connection" introduced by philosopher Noël Carroll (2001). In outlining the theory of narrative, Carroll refers not to a clear set of necessary and sufficient conditions of narrative, but to a networked notion that emerged from a number of important features within narrative that are connected together to make the narrative understandable. Based on Carroll's argument, the narrative discourse is not merely a list of several events or state of affairs, but there must be some sort of sequence of events which implies a temporal ordering. However, a mere temporally ordered list of events cannot be considered narrative because it has no unified subject. As an example, Carroll contrasted annals to stories based on this assumption (see further explanation in Kindt & Muller, 2003; Worth, 2005). In addition to the conditions suggested by Carroll, another necessary condition links the multiple states of affairs together in a way that would make a narrative consistently identifiable as a narrative is causation (Carroll, 2001; Worth, 2005). Causal connection within a story, however, is not a simplistic view of direct or necessary causation (i.e., the earlier events would always causally entail to the later events). Carroll suggests that an earlier event in a narrative connection is at least a causally necessary condition or ingredient for bringing about later events.

Further, besides the condition of how multiple events are causally interconnected, the description of narratives also focuses on the transition from one event to another, which characterizes a narrative with its beginning and end. This refers to construction of plot. Plot is what crafts the multiple events into a story (Carroll, 2001; Worth, 2005). Indeed, Jameson (2001) argues that plot is what holds a story together, in that there is an abstract concept that explains the nature of a narrative. Furthermore, Ricoeur (1984) claims that a story must be an organization of events into an intelligible whole such that audience can always capture the "thought" of the story. Then, according to Jameson (2001), stories operate in two levels: (1) the concrete recounting of events and (2) the abstract concept that unifies the events into a whole and implies their significance (p. 478).

Escalas (2004a; 2004b) suggests two elements that can be used to characterize a narrative: temporal dimension and relational organization. Temporal dimension refers to a plot, which is translated by Escalas as the chronological nature of a narrative. A narrative constitutes of episodes within a timeline which characterize a narrative into its beginning, middle, and end. Relational organization refers to the causality within a narrative; that is a narrative consists of episode schema which explains the characters' goal-action-outcome. In a more recent study to analyze text processing in advertising, Luna (2005) proposes two conditions that characterized a narrative (or multiple narratives): coherence and referential continuity. Coherence refers to the enabling of audience to draw causal, intentional, or temporal structure of narratives. Referential continuity means how each of the narrative parts refers to an entity introduced in the previous parts. These conditions are believed to influence the narrative processing which affect audiences' information processing and, in the end, behavior toward advertising.

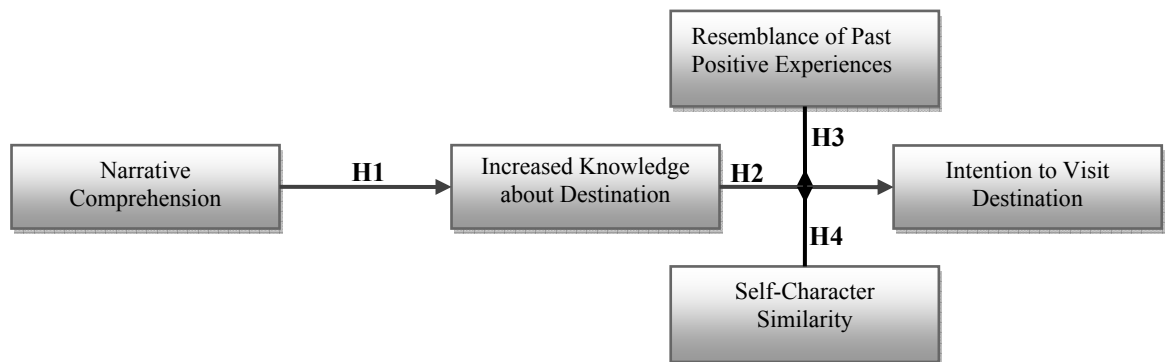
The underlying premise that puts the great importance of narrative in information processing is the belief that people possess (use and can develop) a skill called narrative reasoning which emerged from narrative meaning construction. Worth (2005) argues that people have the capacity to reason narratively in order to have a more comprehensive understanding of the human experience. The narrative knowledge (i.e., knowing what it is like) is beyond the traditional form of knowledge (i.e., knowing how and knowing what) (Worth, 2005). Furthermore, it is argued that narrative reasoning is different from discursive reasoning (Polkinghorne (1988) uses the term "logico-scientific" for this type of reasoning). While discursive reasoning captures the logic, narrative reasoning is related with imagination. Narrative processing is the process of retrieving the readily available information in a story. As

imagination has a potential to help facilitating causal judgments of likely future events, the capacity to imagine and narrative meaning construction are intertwined (Worth, 2005). Formulating narrative processing in the context of advertising, Escalas (2004a; 2004b) define the concept of mental simulation, in which audiences form an imitative mental representation of events (i.e., in the form of a story), and the process of narrative transportation, which is the immersion into the text (i.e., a situation where a person becomes lost in a story). Researchers in Psychology define mental simulation as the “instruction to imagine,” in that narrative has a potential to be persuasive. Extensive research indicates that the narrative power of a story has the ability to “manipulate” mass audiences (Boje, 1999). In brief, stories has the ability to give audiences an instruction to imagine (i.e., to form a mental representation of) the consumption of a product/service.

Escalas (2004a) states that “while one can mentally simulate an episode involving other people, mental simulation typically involve the self” (p.38). Specifically, Phillips, Olson, and Baumgartner (1995) suggest the term “consumption visions;” that is, consumers form self-constructed mental simulations of future consumption situations. They assert that the consumption visions can motivate consumption behavior because these visions involve self-enacting, detailed, product-related behavior. The self-brand connection may be formed based on the perceived psychological benefits from the product (Escalas, 2004b: 168). People are motivated to act positively to a product if they could see themselves in the self-constructed mental stories (within the settings described in the narratives) deriving values from consuming the product. In other words, people will have positive attitudes toward products in self-relevant stories. When consumers read the stories of other consumers, the ability to relate to the stories is significant with the concept of psychological connection suggested by Feagin (2007). When relating to a story, a consumer might link the products in a narrative to the achievement of self-related goals. The connection is a result of a process of mapping the goal-action-outcome structure within the narrative with self-related stories in the memory. This mapping process can be achieved through the association of self with the narratives. In conclusion, it is argued that audiences will be able to imagine the benefits of consuming the same products with the characters in the stories if: (1) they see themselves as similar to the characters (i.e., the audiences think that the characters resemble themselves) and/or (2) they can relate the story to stories stored in their memories (i.e., the audiences recognize similar occurrences in the past).

Based on the conceptualization of narrative structure, narrative processing, and the effectiveness of advertising through narrative, several hypotheses can be developed (Figure 1). Within the context of destination marketing, the narrative structure of a tourist story will help audiences to comprehend the tourist experience in the destination. The narrative reasoning involves retrieving information and recognizing coherence in the story (i.e., plot and causal connection of goal-action-outcome); through narrative reasoning, audiences will be able to form a better knowledge about the destination. **H1:** *The ability to comprehend the narratives of tourists’ stories will increase the overall knowledge about the destination.* When audiences are able to develop a better knowledge about a destination, they will be able to have sufficient information to assess and evaluate the value of the destination. This, in turn, will influence the intention to visit the destination. **H2:** *The increased knowledge of a destination will influence the intention to visit the destination.*

Figure 1
Conceptual Framework of Narrative Comprehension and Visit Intention



Based on the concept of consumption visions (Phillips, Olson, & Baumgartner, 1995), the attitude toward advertising is influenced by the ability to form a mental construct of the consumption. The process of forming mental construct of a tourism experience can be influenced by the past experiences. The increased knowledge about a product will influence the intention to purchase if the audiences perceive that the process and outcome of consumption is similar to their past positive consumption experiences stored in their memories. **H3:** *The increased knowledge of a destination will influence intention to visit the destination under condition of resemblance of the tourists' story with own past positive experiences.* The process of forming the intention to visit the destination also depends on the ability to relate the self to the consumption settings and the consumption outcome. Having enough information about a product through a story will influence the intention to consume the product if the audiences can relate themselves with the character(s) in the story. **H4:** *The increased knowledge of a destination will influence intention to visit the destination under condition of similarity between the self and the character(s) in the story.*

RESEARCH METHOD

Research Context

The aim of this study is to assess the effectiveness of destination marketing using tourists' stories. Several conditions were considered to select the stories for this study: (1) the stories must be written by actual tourists, (2) the stories must portray tourism experiences at the destination, and (3) the stories must be made available to audiences by DMO for marketing purposes. As a result, the blog section of Pennsylvania Tourist Office website (visitPA.com) was selected for the study. The blog section of visitPA.com entitled "Roadtrippers" and themed "Stories from the Road" was introduced during summer 2005. The agency offer travelers to Pennsylvania to share stories about their experiences within the state of Pennsylvania on the website. However, the feature is not an open platform (such as Web 2.0). Interested public can submit their stories (i.e., a submission form is provided on the website), but the Pennsylvania Tourist Office select which stories to be published and also moderate some of the stories. Nevertheless, explaining about the storytellers on the blog, the website states that "...PA Roadtrippers were real people, not actors or advertising types, and they filed their dispatches faithfully so that their audience could experience the State of Independence through their eyes" (visitpa.com/visitpa/roadtrippers.pa). The Website features six different story genres; a story genre contains three to four trips to different parts of Pennsylvania and each trip contains several stories about daily tourism experience, i.e., one blog entry represents one day of experience. Besides text, the blog also features photographic images associated with the stories. On average, a blog entry features at least an image that is placed within the text. Due to the small number of the images available on the blog, this study focuses only on the narratives represented through text. The stories posted on four blog themes were used as stimuli for data collection.

Research Instruments

A questionnaire was designed with questions addressing the variables illustrated in the conceptual framework of this research. The first variable, story comprehension, consists of four questions related to audiences' understanding to the plot of the stories (i.e., two questions are related to motivation, goals, and feeling, two questions are related with outcome or fulfillment of perceived goals). Further, there is a question addressing each of the following: the knowledge about destination, self-character identification/similarity, resemblance of past experiences, and intention to visit the destination and experience the same trip as the characters in the story. These questions were assessed on a five-point Likert-type scale ranging from strongly disagree = 1 to strongly agree = 5. Questions in the last part were concerned with the participants' demographic.

Data Collection and Analysis

This preliminary study was conducted to provide initial feedback on the hypothesis testing to provide a better understanding about the conceptual framework. A total of 126 Students enrolled in four introductory classes in tourism in Spring and Fall 2007 were asked to fill out the questionnaire as an additional task to the required class assignment on blog marketing. Students were chosen for this particular study based on the fact that most bloggers (both writers and readers) are of younger age. Furthermore, according to the MacKay and Smith (2005), younger respondents recalled the written description about tourism destinations more than older respondents. The task was a take-home assignment; each student was given a specific URL address of a series of stories on the RoadTrippers Blog. Stories assigned to a particular student were written by the same storyteller(s) in a chronological order. All students were required to read the whole series of stories thoroughly by navigating through all the provided links on the specified URL address. The data collection resulted in 85 valid responses. Based on the demographic information of the respondents (i.e., about 77% female and 20 years of age in average), linear and multiple

regression analysis were applied to examine four hypotheses this proposed in this research. The research framework was verified using regression analysis in order to illustrate, interrelate, and explain the relationship between story comprehension and the increased knowledge about destination. Multiple regression analyses were conducted to test the subsequent hypotheses.

RESULTS AND DISCUSSION

The correlation matrix is presented in Table 1. Although not all the results show significant results, the variables are inter-correlated. That is, Narrative Comprehension variable correlates with Knowledge about Destination and Self-Character Similarity, while Knowledge about Destination correlates with Resemblance of Past Experience. In addition, Resemblance of Past Experience and Self-Character Similarity are significantly correlated with Intention to visit destination.

Table 1.
Correlation Matrix among Measured Variables

Variables	1	2	3	4	5
1. Narrative Comprehension					
2. Knowledge about Destination	.27*				
3. Resemblance of Past Experiences	.15	.24*			
4. Self-Character Similarity	.22*	.15	.36**		
5. Intention to visit destination	.10	.19	.24*	.59**	
Mean (SD)	3.63 (.62)	3.49 (1.0)	3.02 (1.2)	3.37 (.92)	

Note: * $p < .05$, ** $p < .01$

Hypothesis 1

The first analysis was performed to investigate the influence of the understanding of story on the increasing knowledge about a destination by using linear regression. As represented in Table 2, the relationship between the independent and dependent variables was significantly positive ($F = 6.25, p < .05$). This favorable results support the underlying ability of a story to convey information and knowledge about a product. The ability to understand the narrative of tourists experience at a destination, although it is presented in a first-person perspective (i.e., the description is mainly focused on personal experience consuming the product and not about the product itself), is important to grasp the information and develop knowledge about the destination. This research does not propose the relationship of the narrative comprehension with intention to visit a destination. In order to verify the model, additional regression analysis was executed. As expected, the understanding of narrative does not have a direct effect on the intention to visit a tourism destination ($F = .84, p > .05$). This result verifies the proposed research framework.

Table 2
The Result of Linear Regression Analysis

Variables	Increased Knowledge about Destination	Intention to Visit Destination
Narrative Comprehension (β)	.27*	.10
R^2	.07	.01
Adjusted R^2	.06	-.00
F	6.25*	.84
Degree of Freedom	1	1

Note: * $p < .05$, ** $p < .01$

Hypotheses 2, 3, and 4

A series of multiple regression analyses (hierarchical regression) was conducted to examine the degree of which knowledge about destination influence the intention to visit a destination, either directly (Hypothesis 2), or with moderating factors, which are resemblance of past experience (Hypothesis 4) and self-character similarity (Hypothesis 3). Table 3 shows the beta coefficient and the amount of variation accounted for after each step. The results of Model 1 supports the second hypothesis which posits that increased knowledge about destination (positively) affects the intention of visit but very little variation ($\Delta R^2 = .04, p < .05$). It is argued that knowing more about a tourism destination alone is not sufficient to effectively persuade audiences to have an intention to visit the

destination. It is also argued that the increased knowledge of a destination seems to rather not the crucial factor that accentuates the merit of narrative marketing compared with other forms of advertising. In the next phase of hierarchical regression analyses, resemblance of past experiences was examined as a moderating effect between knowledge as to where travelers visit and the intention to visit. In Model 2, it was observed that the reflection on the past experience increase the model performance compared with the previous model ($\Delta R^2 = .07, p < .05$); however, the total variance was still low. In Model 3, self-character similarity was employed to investigate another moderating effect. Comparing the two models (between Model 2 & 3), it is indicated that the addition of self-character similarity significantly improved the model performance; Model 3 explains about 34% of variation in the intention to visit a tourism destination ($\Delta R^2 = .34, p < .00$). In addition, the self-character similarity significantly and positively affect the intention of visitation ($\beta = .89$). In Model 4, all possible variables for the context of past experience and self-character similarity interactions were incorporated. The results indicate that Model 4 explains about 34% of the variance of intention to visit destination ($\Delta R^2 = .34, p < .00$). Although the Model 4 is statistically significant, the effects of the interaction of moderating factors with knowledge about destination do not necessarily increase the intention to visit destination. According to the variance explained in Model 2 and 3, we can argue that while the effect of resemblance of past experience is positive and significant, the impact of self-character similarity is much stronger than the reminding past memory, even when considering both factors into the models.

Table 3
The Result of Hierarchical Regression Analysis

	Model 1		Model2		Model3		Model4	
	Beta	P	Beta	P	Beta	P	Beta	P
Increased Knowledge about Destination (KD)	.22	.049	.17	.140	.12	.223	.43	.135
Resemblance of Past Experiences (RPE)			.22	.049	.021	.835	.27	.464
Self-Character Similarity (SCS)					.57	.000	.80	.034
Interactions								
KD x RPE							-.33	.497
KD x SCS							-.31	.537
	Model 1		Model2		Model3		Model4	
R ²	.05		.09		.37		.38	
Adjusted R ²	.04		.07		.34		.34	
F	3.99*		4.07*		15.09***		9.26***	
Degree of Freedom	1		2		3		5	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

The results support the moderation models proposed in the conceptual framework of the study. This finding seems to suggest that for the audiences to fully gain an understanding of the consumption settings (and benefits) through a story is by relating themselves with the story. That is, the ability to relate with the story will be stronger when they can identify themselves as, or similar to, the story character(s); when they think that the characters in the story resemble themselves, they will be able to position themselves in the story and derive a better sense of consumption visions. Hence, the strength of narrative in marketing tourist experience is the ability to provide audiences with an imaginable and relatable lived experience of touristic activities at a destination.

CONCLUSIONS

While many tourism researchers (Brucks, 1985; Gursoy & McCleary, 2004) suggested the positive influence of knowledge of products on the intention to purchase the products relating the knowledge of consumer/tourists, the research to increase knowledge is scarce. This research suggested a noteworthy innovative information and/or advertising format within context of consumer narratives in the context of destination marketing. While previous researches define the scope of “narrative marketing” as an approach to introduce “some stories” behind the product (e.g., Escalas 2004a; 2004b) or description instead of list (e.g., Adaval & Wyer, 1998), this research narrow its scope to investigating consumers’ stories (i.e., written in a first-person perspective), journal-like stories of tourism experiences (i.e., not only consumers’ reviews), utilized by DMOs to promote tourism destinations.

Since this form of narrative marketing, particularly related with the use of digital media, has recently been embraced by many companies in tourism and hospitality business, this research significantly contributes to the latest development in tourism marketing by providing a better understanding of the effectiveness of using consumers' narratives in destination marketing. The main limitation of this research is the number of sample size (i.e., 85), which is not enough to generalize the results. The instrument to measure the variables can be another weakness of this research. In operationalizing variables (i.e., Increased Knowledge about Destination, Resemblance of Past Experiences, Self-Character Similarity and Intention to Visit Destination), only one question was asked to analyze each variable. Although the study reported in this paper was conducted with limited number of respondents, the results support the conceptual framework, and instruments, developed for this research. This research opens a pathway to similar research investigating the innovative use of digital media for marketing purposes in tourism and hospitality business.

This research supports the concept of narrative reasoning as human ability to retrieve information and derive coherence from narratives. The results of this study indicate that the high ability to understand the story (i.e., narrative comprehension) has a direct effect on the increased knowledge about a destination (see Table 2). The chronology and causality within a story particularly add to the detailed information about a particular tourism activities within a period of time. Compared with other advertising approach, narratives seem to be able to present multiple interrelated information about particularities of a tourism destination, including, but not limited to, attractions, facilities, infrastructures, and a more abstract value such as the overall atmosphere. In short, the narrative structure is an important device to aid the narrative reasoning and narrative processing to gain knowledge about the characteristics of experiential products. Another contribution of this paper, significant to the concept of mental simulation and narrative transportation (Escalas 2004a; 2004b) and consumption visions (Phillips, Olson, & Baumgartner, 1995), is the vital importance of identification of self with the story characters to aid to story persuasion. In this sense, the mental simulation and consumption visions can be formed when audiences experience the present non-self-referencing narrative processing (i.e., reading stories about others) that leads to future self-referencing imagery (i.e., imagining the self experiencing the same things). This process is enabled when audiences find resemblances of the stories with the stored stories in their memories (i.e., the stories remind them to past positive experiences), and much strongly when audiences can identify the characters as having similarities with them (i.e., audiences fully understand why the characters choose some actions to fulfill certain recognizable goals).

Several implications can be drawn for DMOs. This research signifies the merit of introducing consumers' stories to promote destination, for example with introducing blog capabilities on the official tourist websites. Since the story format is easy to understand, the story may help for novice/inexperienced travelers to obtain information, to make decision to visit the destination, and to make their itinerary. Furthermore, many previous researchers emphasized the importance of word-of-mouth. In this sense, the narrative is also one of the sources of word-of-mouth information. That is, the blog system in which visitors can write down what they experienced by using their own words possess both information provider and advertising functionality to purchase the product. To be able to persuade audiences to visit the destinations, the stories should be able to give the positive notions of the different places at a destination and the touristic activities that the places can afford. DMOs should integrate the narrative marketing strategies with their overall marketing plans. Designing stories for marketing purposes should start with choosing the right character(s) that match the target market. Destinations targeting younger, more adventurous tourists will not benefit from family-oriented stories. On the other hand, destinations can introduce different genres of stories to diversify or expand the current market. Portraying different stories will be effective to provide diverse hypothetical scenarios of travel. Introducing different travel genres and different characters stories can be regarded as customization in advertising; the message about the product (bundles of products) is delivered differently to different market segments. Since audiences tend to relate to the lived picture of a character in the story, introducing characters with different tastes, preferences, and backgrounds can be effective in stimulating empathy among different audiences.

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RELATIONSHIP BETWEEN CHANGES IN CASH FLOWS AND INVESTMENTS IN US RESTAURANT INDUSTRY

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ABSTRACT

The purpose of this paper is to investigate the relationship between investment in fixed assets and free cash flows of financially constrained US restaurant firms given their future investment opportunities. We investigate how restaurant firms invest in fixed capital given their internal liquidity and access to external sources of capital. While the debate over sensitivity of investments to cash flows remains unresolved, it has not been explored widely in industry contexts, especially in the restaurant industry. In addition to its contribution to this literature, our paper will also provide insights into management decision making.

Key Words: investment, fixed-assets, free-cash flows, restaurants

INTRODUCTION

The investment in fixed assets (such as equipment and facilities) by firms and what impacts this behavior, surprisingly, remains a less understood phenomenon. This issue is of critical importance for both theory building and managements' financial decision making processes. Firms can either use internal sources, such as free cash flows, for investments or they can use external sources. Pecking order theory states that the choice of one or more of these sources is dependent upon the associated cost of capital. However, firms' performance and their ability to generate internal free cash flows complicate this picture. For instance, some firms may not have enough free cash flows therefore may have to seek external funding. This issue is different than the cost reason stated in the pecking order theory. It is also in contrast to previous research on how a firm's capital structure does not impact its investment behavior. Therefore, the purpose of this paper is to investigate the relationship of free cash flows and investments in context of firm's financial constraint. This area of research emerged around 20 years ago with the seminal paper of Fazzari et al (1988). The evidence so far is not conclusive on whether financially constrained firms have higher or lower sensitivity to free cash flows. In fact, it has only raised further issues. Another critical gap in this literature is that industry level investigations are almost non-existent thereby limiting our understanding of how business risk may contribute to this discussion. Restaurant industry presents an interesting context for such research. Restaurants are usually high operating cash flow businesses. Therefore extending that logic to investment activity could lead to critical insights for management decision making. We expect that higher financially constrained restaurant firms will have higher investment sensitivity to free cash flows. Other variables that previous literature has investigated such as firm size and future investment opportunities will also be investigated in this paper. Restaurant business also gets impacted by the overall economic conditions (Arbel, 1983). We therefore also look at how aggregate changes in economic conditions measured as changes in the growth of gross domestic product (GDP) could impact this relationship. Findings of this paper are compared with key results of previous studies to understand differences in the restaurant industry. This paper also discusses potential impact of these findings on industry practice.

LITERATURE REVIEW

Why do firms invest in fixed assets, and what are the various determinants of firms' investment behavior? How do firm's internal factors (liquidity, capital structure, governance etc.), and access to external sources of financing influence these investment behaviors? These are some of the underlying questions that have been the focus of firm's investment behavior research over the past century. Turning point in this literature was evidently the celebrated work of Modigliani and Miller (M-M) (1958) where they suggested that financial status of a firm is irrelevant in determining its investment behavior. However, since then, evidence has emerged to point in the

direction of imperfect or incomplete capital markets where the cost of external capital is higher than that of internally available funds (Cleary, 1998). This paper investigates the relationship between investment behavior of restaurant firms and their liquidity position in context of their level of access to external sources of financing, what we call financial constraint. Restaurant businesses are highly cash sensitive, and therefore must focus on maintaining market shares, customer volumes, and overall liquidity of the operations. Improved understanding of firms' investment behavior also has implications on formulating public policies and recognizing factors that would influence their competitiveness. This study will contribute to a systematic dialogue in this area from the perspective of the restaurant industry.

Fazzari et al (1988) discuss that most investment models are based on the assumption that firms are able to respond, through their cost of capital, to the prices set by centralized securities market. An alternative way of analyzing investments is to emphasize the importance of internal cash flows due to their relatively lower costs versus external funds. This approach has led to the emergence of the literature that has analyzed correlations between cash flows and investments. Recent imperfections that been discovered in debt and equity markets have further given credence to this notion that firms that do not have access to external markets must mostly rely on internal sources of funds. The paper by Fazzari et al (1988) marks the beginning of this discussion (and controversy) that later emerged regarding cash flows-investments correlation. Their investigation reveals that cash flows are indeed correlated to investments and this correlation is particularly stronger in those firms that are financially constrained. This later finding is challenged by Kaplan and Zingales (1997). They based their investigation on Fazzari et al's (1988) results and show an almost reverses relationship – firms that are less financially constrained have higher correlation between investments and cash flows versus those that have higher financial constraints. Based on these results they emphasize that higher cash flow sensitivities cannot be interpreted as evidence that firms are financially constrained.

Later Fazzari et al (2000) admit that indeed cash flow-investment sensitivity is lower in financially constrained firms but disagree with a theoretical framework proposed by Kaplan and Zingales (1997) to explain the correlation between financial constraints and cash flows. This discussion is continued by Kaplan and Zingales (2000) in their later response. Surrounding this argument there have been numerous other investigations to explain possible correlations between cash flow-investment sensitivities. Hubbard (1998) presents an overview of this literature and the underlying theoretical arguments. Recently Islam & Mozumdar (2007) investigated investment sensitivity to cash flows using international evidence and exploring the relationship of country level economic development. Therefore, this debate not only continues but has further widened to explore wide ranging issues that may explain investment behavior of firms.

On the other hand, few studies have investigated non-manufacturing sectors (Calem & Rizzo, 1995). Restaurant businesses are highly cash sensitive and therefore must focus on maximizing sales, customer traffic, and overall profitability (Singh, Upneja, & Dalbor, 2003). The general perception is that restaurant businesses lack cash reserves and retained earnings to internally finance fixed assets (Upneja & Dalbor, 2001). However, very little is known about the investment behavior of such firms, especially when they may be constrained to source external funds.

RESEARCH DESIGN

The standard specification of modeling investment sensitivity to cash flow from previous study was used as the basis of investigation in this paper:

$$\frac{I_t}{K_{t-1}} = \alpha + \beta Q_t + \gamma \frac{W_t}{K_{t-1}}$$

Where

I_t is investment in current year

K_{t-1} is the capital stock in the previous year

Q_t is Tobin's Q as a proxy for firm's future investment opportunities

W_t is firm's cash flows in current year.

Financial constrained has usually been measured by the percentage of dividend paid out by the firm to its current income. However, most of the restaurant firms do not pay dividends therefore, this measure proved to be less practical in the case of the restaurant industry. Size of the company is another method that has been used to measure financial constraints of a firm (Cleary, 2006). The argument is that smaller firms are usually more financially constrained than the larger ones. Restaurant firms were categorized as small, medium or large based on size measured as the log of total assets. Then four separate models were evaluated, one for all firms together and three for each of these categories and parameter estimates were compared. In order to control for the impact of economic conditions change in gross domestic product (CGDP) was introduced as a variable. GDP is an appropriate measure of aggregate economic activity and would capture the impact of economic conditions that are of interest to this paper. Finally we added a dummy for the year to capture the time trends in the data.

The final model for each category of firms was as follows:

$$\frac{I_t}{K_{t-1}} = \alpha + \beta Q_t + \gamma \frac{W_t}{K_{t-1}} + \xi \frac{W_t \cdot size}{K_{t-1}} + CGDP$$

Where

I_t is investment in current year

K_{t-1} is the capital stock in the previous year

Q_t is Tobin's Q as a proxy for firm's future investment opportunities

W_t is firm's cash flows in current year

CGDP is the change in GDP between the current year and the previous year

DATA

Financial data for US restaurant companies is collected from COMPUSTAT North America, accessed using Wharton Research Data Service (WRDS). Capital stock is defined as COMPUSTAT #128, investment is defined as COMPUSTAT # 37, and following Kaplan and Zingales (1997), cash flow is defined as the sum of equity in net loss (#106), earnings before extraordinary items (#123), extra-ordinary items and discontinued operations (#124), depreciation and amortization (#125) and deferred taxes (#126). Tobin's Q is calculated as the net assets plus market value, divided by market value. Net assets calculated as COMPUSTAT data #6 - #60 and the market value was calculated as #25 * #199. GDP numbers were downloaded from the Bureau of Economic Analysis of the United States Government website (www.bea.gov/national/nipaweb).

RESULTS

Summary of descriptive statistics are presented in Table 1 and Pearson Correlation Coefficients are in Table 2.

Table 1
Descriptive Statistics

	N	Mean	Std Dev	Minimum	Maximum
DV	1190	0.21018	0.21476	-0.06128	1.77778
Q_t	1085	1.70187	1.11273	0.51841	11.27027
WK1	1064	0.09241	0.35906	-3.28094	1.51673
Year	1220	5.40574	3.08668	1.00000	11.00000
GDP	1220	9950	1558	8717	13195
CGDP	1220	0.05407	0.01093	0.03170	0.06610

DV is the dependent variable and is calculated as I_t/K_{t-1}

I_t is investments in current year

K_{t-1} is the capital stock in the previous year

WK1 is W_t/K_{t-1}

W_t is Firm's cash flows in current year (page 7, 8)

Q_t is Tobin's Q as a proxy for firm's future investment opportunities (page 8)

CGDP is the change in GDP between the current year and the previous year

Table 2
Pearson Correlation Coefficients

Variable	DV	Q _t	WK1	Year	GDP	CGDP
DV	-	0.018452	0.05211	-0.11436	-0.10320	0.07661
Q _t		-	0.06575	0.11608	0.12562	0.05608
WK1			-	0.04661	0.04802	0.04050
Year				-	0.99383	-0.05055
GDP					-	0.02401

The final analysis resulted in two sets of models, the first model without the economic control variable CGDP and the second with that control variable. Results of this analysis are presented in Tables 3 and 4. In Table 3, the set of analysis without controlling for impact of economic conditions, the magnitude of the coefficient for Tobin's Q for small firms is larger than that of medium and larger firms. In Table 4 (analysis with CGDP as control variable) the Tobin's Q performance is of a similar manner with a slightly lower magnitude for the smaller and larger firms and a minor change upwards for the medium sized firms. The firm's changes in cash flow parameter estimates in both Tables 3 and 4 show the measure of sensitivity to changes in investments. The changes in cash flow sensitivity to investments were highest for the large firms and lowest for the medium size firms and this result was not impacted by the addition of CGDP. Changes in investments were more sensitive to changes in cash flows in small firms than in the medium size firms. This pattern did not change when the GDP variable (CGDP) was introduced; however there were minor changes in magnitude of this variable. After controlling for the impact of economic conditions the changes in investments in small firms were less sensitive to changes in cash flows. Investment changes in large and medium size firms were more sensitive to cash flows when economic conditions were controlled. Table 4 also shows the magnitude of the GDP variable. Interestingly its magnitude was the highest for medium size firms. Overall the data for larger firms appeared to provide the most explanatory power based on the R² statistic. The medium sized firm data provided the weakest explanatory power.

Table 3
Regression model without change in GDP

Variable	Intercept	Tobin's q	WK1	Year	R ² Adj	F	N
All firms (t-stat)	0.19737* (12.88)	0.04130* (6.81)	0.09204* (4.22)	-0.01170* (-5.54)	0.0813	28.25	925
Small firms (t-stat)	0.18859* (6.35)	0.07102* (4.93)	0.09632** (2.11)	-0.01355* (-3.38)	0.1034	13.80	334
Medium firms (t-stat)	0.21740* (7.30)	0.03174** (2.82)	0.07737** (2.30)	-0.01396* (-3.24)	0.0520	6.87	322
Large firms (t-stat)	0.13922* (9.18)	0.03292* (4.96)	0.18176** (3.16)	-0.00672* (-3.54)	0.2369	27.42	269

Please see Table 1 for definitions of data items

*p<0.001; **p<0.05; ***p<0.10

Table 4
Regression model with change in GDP

Variable	Intercept	Tobin's q	WK1	Year	CGDP	R ² Adj	F	N
All firms (t-stat)	0.11138** (3.18)	0.04006* (6.61)	0.09099* (4.19)	-0.01132** (-5.36)	1.59324** (2.73)	0.0877	23.20	925
Small firms (t-stat)	0.13586** (2.04)	0.06995* (4.84)	0.09477** (2.08)	-0.01324* (-3.29)	0.97800 (0.89)	0.1028	10.54	334
Med firms (t-stat)	0.07687 (1.04)	0.03202* * (2.86)	0.07826** (2.33)	-0.01250** (-2.88)	2.46739** (2.08)	0.0618	6.29	322
Large firms (t-stat)	0.08977** (3.04)	0.03143* (4.73)	0.18466** (3.23)	-0.00689* (-3.64)	0.98070*** (1.95)	0.2364	21.74	269

Please see Table 1 for definitions of data items

*p<0.001; **p<0.05; ***p<0.10

DISCUSSION

The results in this paper are interesting from many perspectives. The Tobin's Q was introduced in the analytical model as a measure of firms' future growth opportunities. It was interesting to see that the magnitude of Tobin's Q was the highest for small firms and lowest for medium size firms. The small firms outperformed even the larger firms. This implies that market value of the smaller firms provided a stronger explanation of investment activity than it did for the larger firms. This was expected due to the high growth opportunities associated with smaller firms and therefore the impact on changes in investments.

Previous literature is inconclusive on whether investments in higher financially constrained firms are more or less sensitive to free cash flows. In this paper the results seem to suggest some of both sides of this argument. For instance, investments in small firms were found to have weaker sensitivity to changes in cash flows than the larger firms. This is a surprising result especially given that usually small restaurants are considered to require high levels of cash flows. The larger firms came out to show the highest sensitivity between their investments and cash flows. At first both these results appeared counter intuitive. However, interpreting this and the previous result of Tobin's Q together may provide a reasonable justification. The higher growth opportunities of small firms may be allowing these organizations to have higher access to external financing than the larger firms that show relatively weaker growth opportunities. As a consequence the larger firms must rely on internal cash flows for financing growth opportunities. Changes in investment's sensitivity to cash flows were stronger for small and large firms than it was for the medium sized firms. This result, although relatively small in magnitude, was counterintuitive. One would expect investment and cash flow sensitivity in small firms to be more sensitive to economic conditions than the large firms. One possible reason might be that the big firms are more dependent on the economy than previously thought. Smaller restaurant firms might have more loyal clientele.

Overall, these results provide grounds for further investigations and initial indications for impact on industry practices. Anecdotal evidence of restaurant firms' cash flow requirement is abundant however (to the best of our knowledge) there have been no systematic investigations of how restaurant firms manage these cash flows. A critical aspect of this cash flow management is to use them for investments, especially if some of these firms have restricted access to external financing. The current results make an important contribution in this area of hospitality research. Findings in this paper also suggest that our understanding of cash flow analysis in restaurants is in its infancy. For instance the inconsistency of results between the three size categories of restaurant firms appears to be an interesting result. There could be many ways to progress this area of research. First, the size variable could be reassessed to also incorporate the role of ownership. Many restaurant firms are franchised. In these cases the firm ownership of assets is different than if the operations are not franchised. The composition of investment variable and free cash flows also varies. Different compositions can be used to assess impact of various factors on investment-cash flow relationship. Finally, the type of restaurant operation could also impact the investment-cash

flow relationship. This could further provide more specific assessment of changes in industry practice than the current aggregate analysis.

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THE ROLE OF CULTURE IN CUSTOMER PREFERENCES FOR SERVICE FAILURE EXPLANATIONS

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ABSTRACT

Offering an explanation is a type of service recovery effort that could be essential during the recovery process given the human need to understand why things go wrong. Despite their importance to academics and practitioners, research on service failure explanations is scant. This paper proposes that the customer's cultural background will determine the appropriateness of failure explanations. By integrating social accounts theory and cultural dimensions in reasoning and thinking, the authors propose differences across East-Asian and US customers in their preferences for failure explanations. These hypotheses serve as a foundation for future empirical testing and industry applications.

Key Words: service failure; service recovery; explanation adequacy; cross-cultural research

INTRODUCTION

Service failures are pervasive in service encounters (Fisk, Brown and Bitner, 1993; Maxham and Netemeyer, 2002) and have been the focus of attention in academic and industry oriented research due to their significant, and even long-lasting impact on customer satisfaction, loyalty (Roos, 1999) and consequent behaviors such as negative word-of-mouth (Maute and Dubes, 1999). Past research has shown that effective recovery strategies (i.e. actions provided by service providers in response to service failure [Gronroos, 1988]) can mitigate the harmful effects of service failures (Bitner, Booms, and Tetreault, 1990), or even induce higher levels of satisfaction a phenomenon called "service recovery paradox" (Hart, Heskett, and Sasser, 1990). There are various types of service recovery behaviors ranging from apologizing, giving explanations, compensating, and prompt handling of problems (Liao, 2007). Understanding what behaviors are appropriate and how they restore customers' satisfaction and returning intentions is important (Mattila and Patterson, 2004a).

Offering an explanation is a type of service recovery effort that could be essential during the recovery process given the human need to understand why things go wrong. An adequate explanation could reduce the consumer's sense of injustice and negative emotional reactions as it provides an opportunity to correct deficiencies and to restore justice (Dunning, Pecotich, and O'Cass, 2004). Despite the important role of explanations, little research has been conducted regarding what kinds of explanations work best and under what circumstances (Sparks and Fredline, 2007).

Customers' cultural background is one important contingency variable in understanding explanations because culture shapes how people think and reason. Being able to leverage cultural factors in the service delivery process is a source of competitive advantage for service firms (Riddle, 1992). There has been some research on the role of culture in the service evaluation processes, e.g. the dimensions or value judgments of quality service but cross-cultural knowledge on service recovery is scant (Briley, Morris, and Siminon, 2000; Mattila and Patterson, 2004b) and no research exists about cultural differences in perceptions of types of failure explanations.

To bridge that gap, this study aims to discuss the impact of culture on customer preferences for different types of failure explanations. Specifically we investigate the difference in perceived adequacy of several types of failure explanations between East Asian (e.g. China, Korea, Japan, and Taiwan) and Western American customers. If an explanation is perceived adequate by customers, it is likely to be effective (Sparks and Fredline, 2007). The underlying assumption of this paper is that a customer's cultural background (i.e. embedded values and beliefs) will

play a role in his/her perceived adequacy of certain types of service failure explanations. These perceptions of service failure explanations in turn should influence the consumer's satisfaction and loyalty with the service firm.

THEORETICAL BACKGROUND

Social account theories provide a solid theoretical foundation for studies on service failure explanations. A social account is a "verbal strategy employed by a person [service provider] to minimize the apparent severity of the predicament[service failure] or to convince the audience[customer] that the wrongful act is not a fair representation of what the actor[service firm] is really like" (Bies, 1987, p.294). An explanation can serve as an important piece of information or an outcome to customers (Liao, 2007) and research does show that customers have a normative expectation for explanations from service providers when things go wrong (McColl-Kennedy and Sparks, 2003).

The social accounts theory proposes that moral outrage can be mitigated by social accounts through the mediation of the increase of the perceived justice (Bies, 1987). Research in the context of service failure follows the same line of reasoning and proposes that customer fairness perceptions mediate the service recovery behavior and customer satisfaction. Several empirical studies have investigated specifically the positive influence of providing failure explanations on customer perceived (interactional) justice and consequent satisfaction and loyalty (Karatepe, 2006; Mattila, 2006; Mattila and Patterson, 2004a; Tax, Brown, and Chandrashekar, 1998).

It is noticeable that there are boundary conditions for explanations to be effective. For example, when the outcomes of service failures are severe (Smith, Bolton, and Wagner, 1999) or when failures are repeated (Maxham and Netemeyer, 2002), failure explanations will be less effective or even lead to dissatisfaction. Liao (2007) unexpectedly found that when other recovery efforts were offered at the same time, providing an explanation could be negatively related to perceived justice. Although hardly mentioned in literature, one explanation for findings against the effectiveness of explanations may be the timing of service failure explanations (e.g. being provided right away when the failure occurred vs. when customers complained). Most empirical studies on the effect of failure explanations were set in the context of product marketing and at the stage of post-complaint. However, when customers make complaints they might have inferred that companies made unforgivable mistakes. Under these circumstances, explanations cannot serve its functions of providing information and helping judgments. Therefore, to investigate the maximum effectiveness of service failure explanations, this study defines failure explanations as those being provided right away when both service providers and customers are aware of the occurrence of service failures.

Table 1
Typology of service failure explanations (adapted from Bies, 1987: 304)

Types	Informational property	Example: 5 hour delay of flight
Causal (excuse)	Decline responsibility and claim no other choice	Due to the problem of destination airport
Ideology (Justification)	Accept responsibility and use value-laden terms	For the safety of every passenger
Referential-people	Point to other people who receive worse outcomes	Other flights have been cancelled.
Referential-time	Suggest better future outcomes	It is better to wait here instead of flying there with the need to return.
Referential-aspiration	Indicate original expectation is unrealistic	This flight never departs on time.
Penitential	Express public remorse	We are truly sorry about this.

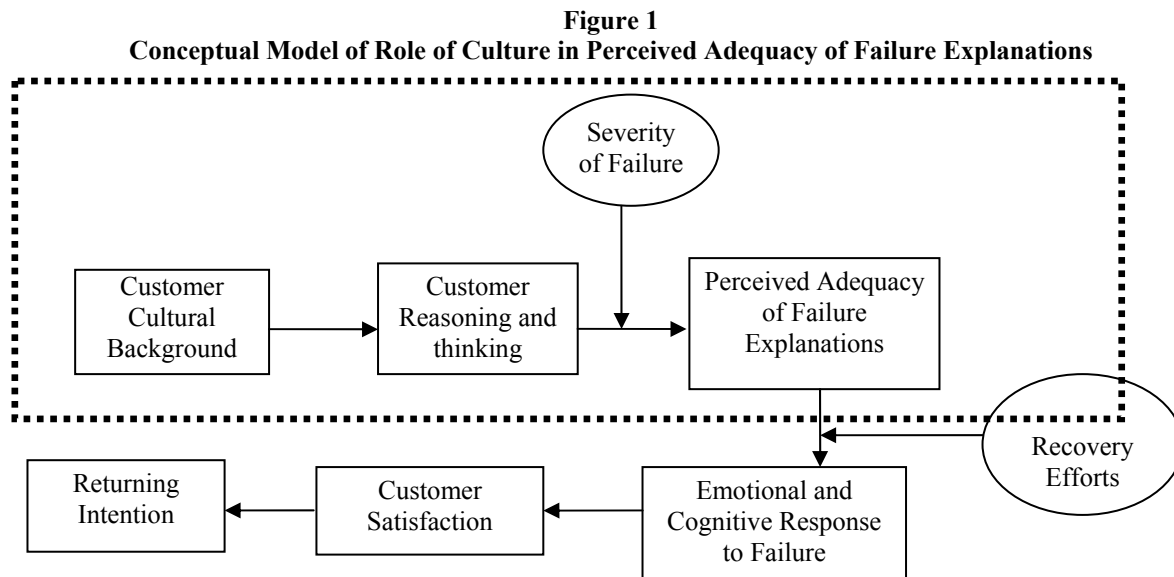
Given the uncertainty about the effectiveness of explanations and the importance of the explanation content for explanations' perceived adequacy (Shapiro, Buttner, and Barry, 1994), it is necessary to investigate different explanations types. Most research in explanations across different disciplines adopts a taxonomy developed by Scott and Lyman (1968) and Bies (1987). Scott and Lyman (1968) first identified two types of explanations based on their different purposes: excuses and justifications. The main purpose of an excuse is to deny full responsibility by citing

some external cause or mitigating circumstances whereas the purpose of a justification, in which people admit the responsibility, is to deny the inappropriateness of the act. Bies (1987) integrated these two types of explanations into his well-known typology of social accounts, terming excuses as “causal accounts” and justifications as “ideological accounts”. The other two types of explanations in Bies’ (1987) model are “referential accounts” in which explanations involve comparisons from social, temporal and aspirational aspects, and “penitential accounts”, a public expression of remorse. Table 1 provides a summary and example statements of different explanations for a scenario of the flight delay.

Despite the importance of explanation types, very few studies have addressed this in the context of service failure. The study by Mattila and Patterson (2004b) indicated that causal explanations helped customers, particularly Western ones, to make external attributions but they did not compare the efficacy of causal explanations with other types. Sparks and Fredline (2007) directly compared the efficacy of justification and referential explanations (comparing with other customers that encountered worse outcomes). The experiment on Australian customers with the scenario of overbooking in a hotel showed that referential accounts were more effective especially in times of high severity of failure. Nevertheless, more other explanation types and the role of customer cultural background await further exploration.

CONCEPTUAL MODEL AND HYPOTHESES

The conceptual model of this study is presented in Figure 1. Variables within the dotted rectangle are the focal discussion of this paper: do customers from different cultures perceive different types of explanations differently, especially in terms of adequacy of explanations? The variables outside the dotted rectangle have been addressed in past studies and thus will not be the focus and hypotheses of this study.



Cultural difference in reasoning and thinking

Culture influences how people think and perceive an event. Past research has indicated a host of differences in perceptions and cognitions between people from East Asian cultures (e.g., Japan, China, Taiwan, Korea) and people from Western cultures (the United States, Canada, Australia) (Markus and Kitayama 1991; Nisbett, Peng, Choi, and Norenzayan, 2001). Drawn from cross-cultural psychology literature, several cultural dimensions of thinking and reasoning are proposed to influence customer perceived adequacy of explanations.

Independent and interdependent self

The relationship between self and others is among the most significant sources of cultural differences (Markus and Kitayama, 1991). In the notion of independent self, individuality and uniqueness are emphasized whereas in the notion of interdependent self the group is the most fundamental component of a society. East Asians' interdependence with others leads them to have a strong sense of interconnectedness with others and thus fulfill

obligations to others and maintain group harmony. On the other hand, Westerners tend to exist independently of the norms and expectations of other people (Fiske, Kitayama, Markus, and Nisbett, 1998; Hofstede, 1980; Markus and Kitayama 1991; Yuki 2003).

The relation between self and others influences how people evaluate and react to an event. As people in a collectivistic culture, East Asians care about needs and rights of other people in the event while Westerners are supposed to look after themselves. Based on Hampden-Turner and Trompenaars (1996), Americans are self-oriented and East Asians are more concerned with people whom they interact both professionally and socially. Since service encounters are first and foremost social encounters (McCallum and Harrison, 1985), East Asian customers shall care more about interactions with service providers than Americans.

The notion of independent versus interdependent self also influences customers' attributional tendency---how they interpret the situation and make judgments. A variety of evidence shows that East Asians maintain a holistic perception of the world, focusing on how objects are interrelated with one another and being aware how the surrounding context can influence focal events (Choi and Nisbett, 1998; Masuda and Nisbett, 2001). On the contrary, Westerners have a more analytic view of the world, perceiving focal objects as relatively detached from the surrounding context (Nisbett et al., 2001). Thus Americans would be expected to be more prone to the fundamental attribution error---attributing dispositions of the person and slighting the role of situations and contexts (Ross, 1977). In addition, Americans take into account a smaller amount of information when making an attribution than Chinese do (Maddux and Yuki, 2006).

Customers go through attributional processes when evaluating services. Studies have shown cross-cultural difference in attributional processes. For example, westerners tend to give internal, dispositional explanations for failure behaviors whereas East Asians have a more holistic, situation based cognition orientation toward service failures (Mattila and Patterson, 2004b). Customers may consider explanations that are congruent with their initial attributions to be more adequate.

Power distance

Power distance is the extent to which status differences and social inequality are expected and accepted within a culture (Hofstede, 1980). In cultures of large power distances, less powerful members of institutions or organizations are more likely to accept the unequal distribution of power compared to those in cultures of small power distances (Hofstede, 1991). Most East Asian countries such as China, Japan, Korea, Singapore, and India are characterized by large power distances that reflect social hierarchies whereas many Western countries such as UK, USA, Canada and Germany are characterized by small power distances (Hofstede, 1991).

Service research has shown that power distance is related to customer service expectations, evaluations and behavioral intentions. In cultures characterized by large power distances, customers expect to be treated as having higher power and receive service at a higher level of quality (Donthu and Yoo, 1998; Liu, Furrer, and Sunharshan, 2001; Mattila, 1999). Furthermore, such notion affects customers' attention to different dimensions of service quality. Customers from cultures of large power distance pay attention to personalized services, responsiveness and reliability and yet does not care much about assurance (Furrer, Liu, and Sunharshan, 2000; Mattila, 1999). As culture and status both influence account giving and preference (Takaku, 2000), power distance is considered to influence customer perceptions of failure explanations.

Acceptance and judgments about contradictory propositions (dialectical thinking)

People are often confronted with contradicting information in their daily lives. Peng and Nisbett (1999) claim that cultural differences in views of the world impact the acceptance level of contradicting information and their statements are summarized as follows. East Asians believe the world is in constant flux and such change and complexity have implied contradiction. By accepting change and complexity, East Asians accept and are able to process two sides of information that is opposed to each other. On the contrary, Westerners believe in the constancy of the world and contradictions are unacceptable by the laws of formal logic. Their thoughts are governed by three principles resting on Aristotelian logic: the law of identity (A must be A regardless of situations), the law of noncontradiction and the law of the excluded middle. Therefore, contradiction can only exist as a temporary state that will be replaced by linear, logical reasoning and ultimately one side of argument

Being different in the acceptance of contradicting information, people of two different groups of cultures use different information processing strategies to apparent contradiction—the dialectical thinking (Peng and Nisbett, 1999). Dialectical thinking is a powerful style of thought that incorporates and synthesizes opposing ideas or concepts (Kahle, Liu, Rose, and Kim, 2000). The experiment conducted by Peng and Nisbett (1999) indicates that Chinese prefer the compromise approach, believing both pieces of information to be true and thus seek a “middle way” whereas Westerners tend to adopt the differentiation approach, deciding that one is right and the other is wrong. Such cultural difference can be traced back to views of the world, philosophical and psychological traditions and thus appears that two cultures have different rational foundation of dialectical thoughts.

The cultural dimension in dialectical thinking has not been applied in service research. Nevertheless, the acceptance and judgments about contradictory evidence could affect whether a customer considers an explanation appropriate or not. When customers encounter and interpret or attribute service failures, they are often presented with contradicting information. For example, should it be the company or a situational or environmental factor that to be blamed for the failure? Therefore cultural differences in dialectical thinking will lead to different perceptions of explanations.

Time orientation

An important dimension in Kluckhohn and Strodtbeck’s (1961) cultural model is orientation toward time—the focus of life on the past, present and future. Long-term orientation has been a concept that arouses confusion and controversy since in certain cultures respecting the past can co-exist with looking forward to the future. Bearden, Money, and Nevins (2006, p.457) define LTO clearly and specifically for the application of consumer research: “LTO is the cultural value of viewing time holistically, valuing both the past and the future rather than deeming actions important only for their effects in the here and now or the short term”.

East Asians, with the share of Confucian values, emphasize tradition, perseverance and saving for the future, which can be considered to have LTO and their LTO scores are higher than Americans (Hofstede and Bond, 1988). Such cultural differences in LTO may cause customers to respond differently to time oriented marketing messages such as those in advertising and promotions (Bearden et al., 2006). Thus LTO is assumed to influence perceptions of explanations since service providers some time refer to the past or future when giving accounts.

Hypotheses

Integrating the typology of explanations from social accounts theory and cultural differences in reasoning and thinking, hypotheses regarding which explanation will be perceived more adequate by certain cultures are formed in the table 2.

Table 2
Hypotheses about cultural differences in perceived explanation adequacy

Types	Culture dimensions that affect different perceptions	Culture that would perceive more adequacy
Causal (excuse)	Dialectical thinking; Independent vs. interdependent self	East Asian
Ideology (Justification)	Dialectical thinking; Independent vs. interdependent self	Equally adequate
Referential-people	Independent vs. interdependent self	Western American
Referential-time	Time orientation	East Asian
Referential-aspiration	Dialectical thinking; Independent vs. interdependent self; Power distance	Western American
Penitential	Independent vs. interdependent self; Power distance	East Asian

Causal explanations: Acceptance of dialectical thinking and attributional tendency could influence whether people perceive causal explanations to be adequate or not. Causal explanations often contain contradicting information (e.g. a failure occurred in the service firm but it was not due to the service firm) and tend to deny responsibility. Americans do not like to process contradicting information and tend to attribute blames to individuals (the service provider), and thus would not prefer causal explanations. On the other hand, East Asians are used to the changing nature and situational influences of the event, and are able to process the contradicting information. As a result, East Asian customers may be more willing to accept causal explanations.

H1: East Asian customers may perceive causal explanations as more adequate than American customers.

Ideology (Justification): Justification is similar to a causal explanation in that they both claim that the failure was not voluntary but driven by external influences. The major difference is that when giving justification explanations, service providers admit their mistakes and take responsibility for the failure. This responsibility-taking is congruent with American customers' assumption that service providers should be blamed for. Thus unlike causal explanations, it is hypothesized that customers from both cultures will be equally receptive to justification explanations.

H2: East Asian customers may perceive justification explanations as adequate as American customers.

Referential (people): A referential account tells customers that what they encounter is much better than what other customers received. This type of failure explanations was shown to be effective in an Australian context (Sparks and Fredline, 2007). With the notion of independent and inter-dependent self, however, it is hypothesized that East Asians, who tend to be more caring about the welfare of others, will consider this explanation type as less adequate than American customers.

H3: East Asian customers may perceive referential explanations (when compares with other customers) as less adequate than American customers.

Referential (time): Another explanation type is the referential account that involves the comparison of time. Service providers sometimes use a future-oriented referential account to promise better services in the future. Considering the long-term orientation of people from different cultures, such future promise may work better when being given to people that care and be optimistic about future. For people that care only about the moment, the future promise is meaningless and unconvincing. As East Asians are more long-term oriented, it is hypothesized that this explanation type will be considered more adequate by them.

H4: East Asian customers may perceive referential explanations (time) as more adequate than American customers.

Referential accounts (aspiration): another type of referential account involves the comparison of peoples' original expectations. When giving this type of explanation, service providers would suggest that customers' initial expectations were unrealistic so that service failures were not that unexpected and unbearable. For Americans, this explanation type contains contradicting information which they do not tend to accept. For East Asians, their interdependent-self views lead them to value respect, status, and face in their social behaviors (Hui and Au, 2001) and the large power distance in society makes it inappropriate to correct people of higher status in public. As this explanation tends to cause customers to lose their face, it is hypothesized that East Asians would consider this explanation type less adequate.

H5: East Asian customers may perceive referential explanations (aspirations) as less adequate than American customers.

Penitential accounts (remorse): This explanation type is the apology that service providers express during service failures. Despite its simplicity, an apology can be considered as a valuable reward that redistributes esteem and concerns to customers (Hart et al. 1990; Walster, Berscheid, and Walster, 1973), and thus it can enhance customer-perceived justice (Smith et al. 1999; Tax et al., 1998). Since East Asians stress the harmonious

relationship with others due to their interdependent-self view and the importance of politeness in a hierarchical relationship (Brown and Levinson, 1987) as a result of large power distance, it is hypothesized that they will react more positively to apology.

H6: *East Asian customers may perceive apology as more adequate than American customers.*

Moderator: The perceived adequacy of service explanations may differ depending on the magnitude of the failure. Literature from both organizational behavior and marketing fields indicate that explanations for a more severe problem are perceived as less adequate than those for a less severe problem (Colon and Murray, 1996; Shapiro, 1991; Smith et al., 1999). Hence, in this study, service failure severity is considered as the moderator between explanations types and their perceived adequacy.

THEORETICAL AND PRACTICAL IMPLICATIONS

The proposed cultural differences in the perceptions of failure explanations have both theoretical and practical implications. Our predictions extend the literature on service failure and recovery literature by offering new insight into specific recovery measures, namely explanations. By referring to the model of social accounts developed by Bies 1987 and significant cultural dimensions related to reasoning and thinking about service evaluations, this conceptual paper offers a comprehensive discussion on the effectiveness of different failure explanations, mainly contingent upon the cultural background of customers. Various research methods such as experiments and surveys can be applied to empirically test our proposed hypotheses. Furthermore, scholars can further extend this topic of research to other cultures (e.g. different regions of Europe and Latin America) and make corresponding hypotheses and empirical tests.

For the hospitality industry, this paper offers various practical suggestions for dealing with service failures. When service failures occur, contact employee should offer explanations as they are a relatively inexpensive marketing tool (Shapiro et al., 1994) that can help restore customer satisfaction. By considering the cultural background of their customers and being trained about the cultural differences in explanation preferences, contact employees are able to give accounts that will be convincing and appropriate to customers. Given the scarce research on failure explanations in service encounters, this paper hopes to assist marketing practices and inspire further research.

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IMPACTS OF CULTURAL TOURISM UPON QUALITY OF LIFE: THE RESIDENTS' PERSPECTIVE

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ABSTRACT

Cultural tourism is considered a viable avenue to attract tourists to a destination and to enhance the residents' quality of life (QOL). This empirical and exploratory study aims at identifying cultural tourism indicators and examining their impacts on the local population's QOL. After analysis, five factors were identified, reflecting local residents' perceptions of cultural tourism. Three of those factors were found significant in impacting people's QOL. The results of this study indicate that local residents in Indianapolis have a positive feeling toward the city's cultural tourism initiatives and believe that their QOL can be favorably affected by the cultural tourism development.

Key Words: cultural tourism, quality of life, residents

INTRODUCTION

Many cities increasingly view cultural tourism as a driver of future economic growth. However, the full picture of the impact of cultural tourism upon urban environments is not well understood. In 2002, Indianapolis embarked in promoting and implanting a cultural tourism initiative. Cultural tourism as defined by the Indianapolis Cultural Development Commission is "experiencing the diverse mosaic of places, traditions, arts, celebrations and experiences that the Indianapolis area offers to residents and visitors. It is an important component of an overall tourism plan that emphasizes the total Indianapolis experience" (p. 1). Furthermore, the commission states, "In addition to all the growth and expansion Indy is experiencing and will continue to experience, there is even more to celebrate. A powerful sports schedule, exciting national conventions, landmark anniversaries, and new summer celebrations will together tell the Indianapolis story. It's a chance for the city to be recognized for the cultural destination that it is" (Indianapolis Cultural Development Commission, 2004, p. 1).

The city-wide cultural tourism initiative set sights on positioning Indianapolis as a premier cultural tourism destination. One of the initiative's objectives was to improve the QOL for Indianapolis residents by capitalizing on the city's cultural amenities and attributes. One of the first projects of the Commission was the creation of the Cultural Districts Program to facilitate the cultural development of six distinct neighborhoods or districts that offered a critical mass and unique mix of arts, cultural and hospitality activities. The development of these six neighborhoods was designed to share the unique, authentic and diverse character of Indianapolis and its people with residents and visitors alike.

It has been several years since the beginning of the Indianapolis cultural tourism initiative. Now there is a need to measure the influence of cultural tourism on residents' QOL. According to Foo (2000), measuring QOL can be done through both objective and subjective indicators. Objective indicators are derived from such areas as population, occupation, income, welfare, etc. These indicators can usually be well-defined and quantified without relying on individual perceptions. Subjective indicators are mostly based on psychological responses, such as life

satisfaction and personal happiness. The subjective indicators essentially capture experiences that are important to the individual residents. A great deal of research and analysis has been done in recent years in the area of QOL indicators. These studies have yielded a vast number of potential indicators which could be incorporated within cultural tourism planning such as emotional well-being, health, intimacy, safety, material well-being, and community well-being (Cummins, 1996).

In short, much has been written and discussed about the impacts of tourism on host communities in terms of residents' QOL (Cohen, 1978; Linton, 1987; Jurowski, Uysal, & Williams, 1997; Kim, 2002; Perdue, Long, & Allen, 1990; Wennergren & Fullerton, 1972; Williams & Shaw, 1988). However, limited literature exists as to what and how tourism indicators may affect residents' perceptions of their overall QOL. Results of studies such as this will be essential for urban tourism marketers to initiate programs that meet the needs of both cultural tourism development stakeholders and boosts residents' QOL, and therefore, securing a sustainable development of urban cultural tourism.

This study is designed to bridge the gap between cultural tourism initiatives and residents' feelings of their QOL. Furthermore, the purpose of this study is to examine the relationship between QOL and cultural tourism indicators and to identify key cultural tourism indicators which have significant impacts on residents' overall satisfaction of QOL.

Specifically, this study is designed to achieve the following four objectives:

1. Describe Indianapolis residents' overall feelings of QOL;
2. Assess residents' awareness and perceptions of Indianapolis cultural tourism development efforts;
3. Identify the potentially beneficial indicators of the urban cultural tourism development;
4. Examine the impacts of cultural tourism indicators on residents' overall satisfaction of QOL.

LITERATURE REVIEW

This section will first review research in cultural tourism related to development, how cultural tourism is perceived by visitors and by residents. Next, discussion on measurement of QOL and impacts of cultural tourism on QOL will be presented.

Cultural Tourism

Several researchers (Bachleitner & Zins, 1999; Cave, Ryan, & Panakera; 2007; Murphy & Boyle, 2006) have studies issues related to the importance of cultural tourism. Murphy and Boyle (2006) examined the development of cultural tourism in Glasgow, Scotland interviewing key personnel in the economic, tourism, and cultural development in the city. Their study revealed that although Glasgow had various strengths, it appeared that the city was lack of unique selling point. They recommended that the city needs to differentiate itself from its competition and suggested that success in cultural tourism depends on factors that are unique to a local place. Therefore, future cultural tourism study needs to focus on local contextual characteristics instead of general factors as proposed in the literature. In addition, a number of post-industrial cities in UK in the 1980s attempted to transform themselves into cultural tourism destinations. This strategy was used in order to raise city pride and profile and to attract more investment and tourists (Murphy & Boyle, 2006).

Bachleitner and Zins (1999) studied cultural tourism in rural communities in Austria. They compared local residents' attitude toward cultural tourism during a major cultural event and one year following the event. The results show that more than half of participants favored the tourism development but only one-third was prone to actively support it. In addition, they found that several demographic factors influence residents' attitude toward tourism development, namely residential location. The further away the residents live from major cultural tourism activity, the stronger their perceptions are toward tourism's impact on the environment.

Cave, Ryan, and Panakera (2007) investigated how residents perceived the attractiveness of cultural tourism in Auckland, New Zealand. Their study compared the perceptions between migrants and host communities. They found that activities that were free and family-oriented were perceived equally attractive by both groups. However, they found that the migrants focused more on preserving traditional culture and value than the other group did (Cave et. al., 2007).

Quality of Life

QOL can have multiple meanings to different individuals. Some would argue that in order for a community to enjoy a good QOL, residents should feel safe from crime, live in affordable and high quality housing, and have access to quality education and employment opportunity. Indeed, these are basic expectations for a livable community. These indicators go beyond economic status, age, race, household composition, or any other demographic indicator.

There are subjective ideas of what makes a city an enjoyable place to live. These ideas often center on the character of a city. Increasingly, cities and regions throughout the developed world are developing locally-based measures to assess QOL. For example, a volunteer civic project called “Sustainable Seattle” introduced the concept of sustainability indicators for a metropolitan region with a pioneering report in 1993. They were inspired by Jacksonville, Florida’s “QOL” measures and the State of Oregon’s growth-oriented “Benchmarks.” The volunteers of Sustainable Seattle were seeking to do something different — measure progress towards true sustainability, or “long-term cultural, economic, and environmental health and vitality” (AtKisson, retrieved January 11, 2008, from <http://www.sustainablepittsburgh.org/>).

Studies, like the above projects, have assessed over 200 indicators of QOL. They have reviewed QOL at the neighborhood, city, county and metropolitan level. Some have collected unique measures of QOL, reflective of local environmental, social, and economic condition, while most communities have simply relied on data from the U.S. Census. The concept of “QOL” as a multi-faceted concept seeks to include a wide variety of critical variables within a unified framework. In this case, the Indianapolis QOL research methodology defines QOL as a nexus where physical, environmental, mental, spiritual and emotional characteristics are all considered.

Wennergren and Fullerton (1972) use three indices to measure a community’s QOL: (a) economic, (b) social, and (c) environmental. The geometric mean of the three indices, weighted by the population of the community, is used as an overall measure of community well-being. A series of studies have addressed issues related to the ability of travel and tourism to both enhance and diminish the QOL of local residents in the host community (Cohen, 1978; Linton, 1987; Williams & Shaw, 1988; Jurowski, Uysal, & Williams, 1997; Perdue, Long, & Allen, 1999). To date, little is known about the impacts of tourism on the perceived host community well-being.

Anderson and Nurick (2002) considered the conventional economic appraisal of cultural projects and focused on the ‘measurement of the measurable,’ such as visitors attracted, jobs created, and income generated. However, the researchers argue that they do not consider ‘immeasurable’ effects such as psychological and physical happiness, culture, and environmental health and safety on the places and regions in cultural projects. Therefore, the challenge lies in how to measure the changed image and aspirations of a place and the QOL of its residents due to the impact of culture. The study results indicate that there is increasing evidence that QOL is becoming an important factor in relocation-related decisions for both skilled workers and business investors, and that cultural projects can greatly strengthen a city’s ‘brand’ or image and helps it to be perceived more favorably (Anderson & Nurick, 2002).

Kim (2002) investigated how tourism development influences the QOL of residents in different stages of development. Overall satisfaction with life was used as the measurement for QOL. The results show that tourism development did affect people’s overall life satisfaction. During the initial stage of tourism development, residents may feel stress caused by change and demand for more public services and infrastructure. People’s life satisfaction is higher during the maturity stage of the tourism development. When tourism development enters its declining stage, residents’ QOL may start to decline.

To date, little is known about the impacts of tourism on a community’s subjective well-being. Since the tourism domain consists of both tourism and non-tourism activity, it is unclear at the present time if the findings from past studies can be directly applied to a community’s overall well-being. This study focuses on identifying the overall well-being of the Indianapolis community and the impacts of urban cultural tourism development on the residents’ overall satisfaction of their QOL.

RESEARCH METHOD

The following three objectives were established to address the purpose of the study: (a) design a survey to be administered to Indianapolis residents, (b) utilize a number of statistical techniques, including descriptive statistical analysis to detect Indianapolis residents' demographic profiles and their perceptions about cultural tourism, and (c) perform a factor analysis and a regression analysis to determine which cultural tourism factors are significant in determining the residents' overall satisfaction with their QOL.

Instrument Design

After reviewing previous research similar to the theme of this study, a total of 21 cultural tourism attributes were developed. Those 21 attributes were measured on a five-point scale ranging from strongly agree (1)" to "strongly disagree (5)." The item of "Overall satisfaction with the QOL in Indianapolis" will be used as the dependent variable in the consequent regression analysis. Questions regarding respondents' demographic characteristics, such as age, gender, ethnicity, household income, and length of residency were included to paint a picture of the demographic profile of respondents.

Instrument Administration

The research team attracted subjects through a convenience sampling technique where subjects were selected on the basis of their availability. Only those individuals who agreed to volunteer and met the subject criteria were approached and asked to complete a survey. All research participants were volunteers, 18 years of age or older, and residents of Indianapolis. Convenience sampling was selected instead of a random sampling due to the location of the administration of the survey (Indianapolis) downtown area and the realization that only a small sample of subjects had time and agreed to complete the survey. The administration of the survey was carried out during all days of the week from 11:00am to 1:00pm. The team collected 355 usable surveys and the data were entered into SPSS for analysis.

Data Analysis

The mean ratings of the 21 perceptual items were computed and tabled. Factor analysis was used to reduce the cultural tourism items into a smaller set of factors. Multiple regression analysis was then employed to determine the significant impact of these cultural tourism factors on the overall satisfaction level of the residents' QOL. The five cultural tourism factors are used as independent variables, while one item was used to define dependent variable, "overall satisfaction."

RESULTS

Demographic Profile

Table 1 (Table 1 omitted for abbreviation) presents the respondents by gender. Men and women were evenly distributed, with 50.4% of the sample reporting as male. In terms of age groups, the mode of age groups was the younger group (18-30 years old), representing 31.3% of the total. The middle age groups of 31-43 and 44-56 years represented the remaining two—third of the population, (30.7% and 31.3%, respectively). Very few respondents participated from the senior age group of over 56 years old (6.4%). With respect to ethnicity, most respondents were Caucasian (4.1%). The next largest ethnic group was African American (18.4%). Other ethnics represented included Hispanics (3.0%), Asian or Pacific Islander (3.3%) and Native Americans (1.5%).

The majority of the respondents have lived in Indianapolis for over ten years (64.6%). Only 9.75 percent of them have lived in the city for less than one year. Table 1 shows that respondents were equally distributed in terms of family income: 27.0% of the respondents indicated less than \$30,001 household income, another 25.1% had household income of \$30,001-60,000, and the other more than one-third with household income over \$60,000.

Mean Ratings of the Perceptual Items - Cultural Tourism Items and Overall Satisfaction

Table 2 (Table 2 omitted for abbreviation) shows the mean ratings of all the cultural tourism attributes. All 21 of the cultural tourism items were perceived positively by the respondents, ranging from 2.09 to 2.96. The top five attributes with the lowest mean scores include "good for the economy" (2.09), "great place to shop" (2.15), "many attractions/activities/events/things to do" (2.18), "help create a community spirit" (2.18), and "enjoy the events and festivals" (2.19).

Factor Analysis of the Cultural Tourism Attributes

The cultural tourism attributes' internal reliability is tested before running the factor analysis. The Cronbach's Alpha of all the items is .917. As a result, all the 21 items were entered for the factor analysis. The result of the factor analysis is presented in Table 3 (Table 3 omitted for abbreviation).

For the 21 items, the test statistic for sphericity is large (3448.278) which is statistically significant at 0.001. The KMO measure of sampling adequacy of these variables was 0.911. The communality ranges from .501 to .804. Five factors are extracted from the factor analysis, explaining a total variance of 65.27%. Based on the items grouped under each factor, these five factors were labeled as "Events, festivals, and life enriching" (F1); "Promotion and management of cultural tourism" (F2); "Urban attractiveness" (F3); "Cultures/transport" (F4) and "Residents' awareness" (F5). In terms of these factors' summated mean scales, "Promotion and management of cultural tourism" (F2) obtains the lowest mean scale of 2.26, which was perceived most favorably by the Indianapolis residents. The second lowest rated factor is "Events, festivals, and life Enriching" (F1) at 2.30, followed by "Urban attractiveness" (F3) at 2.38.

Predicting Residents' Overall Satisfaction with their QOL

This study assumes that people's perception of cultural tourism plays a significant role in determining their overall satisfaction with their QOL. In conducting the regression analysis, the variable of "Your overall satisfaction with the QOL in Indianapolis" serves as the dependent variable, while the five cultural tourism factors are used as the independent variables.

As illustrated in Table 4 (Table 4 omitted for abbreviation), the regression equation model which predicts residents' overall satisfaction with their QOL, reports an adjusted R^2 of 0.175, therefore 17.5% of the total variance in the dependent variable can be explained by the cultural tourism variables in the model. The F-ratio of 10.77 is significant (Prob.< 0.01), indicating that the result of the equation model could hardly occur by chance. The degree of variable collinearity is considered acceptable with the variance inflation (VIF) less than 10. There are three factors remaining in the model with the t values for the partial correlations statistically significant below the level of 0.01. These factors are F1, F3 and F4. The other two factors (F2 and F5) are found insignificant. As a result, the factors of F1 - "Events, festivals, and life Enriching", F3 - "Urban attractiveness" and F4 - "Cultures/transport" are found significant in predicting residents' overall satisfaction with their QOL.

The regression model further indicates that the most important cultural tourism factor in contributing to residents' overall satisfaction is Factor 3 - "Urban attractiveness" (Beta=.282), the second important one is Factor 1 - "Events, festivals and life enriching" (Beta=.269), followed by the fourth factor - "Cultures/transport" (Beta = .166).

DISCUSSION

It is widely accepted that tourism development should include efforts in managing the welfare of local residents, as cultural tourism may exert major impacts on the local community's QOL. This study assumes that there exists a reciprocal relationship between urban QOL and cultural tourism development. On one hand, the majority of residents tend to be in favor of tourism and perceive the resulting impacts on their QOL as being mainly positive (Pizam, 1988; Konca, 1996; Bachleitner & Zins, 1999). On the other hand, the QOL as experienced by the residents of a city can also be the motivator that attracts visitors to the city. Indianapolis tourism statistics indicates that about 40% of people traveling to Indianapolis are coming to the area to visit friends and relatives. This shows that the residents' attitudes towards cultural tourism initiatives are important to the sustainability of urban cultural tourism development and success. The more awareness and involvement that residents have with cultural tourism, the more likely they will be ambassadors for the destination.

This study measured residents' perceptions of cultural tourism related attributes and their overall satisfaction with the QOL, and identified the key indicators of cultural tourism which play some significant roles in impacting residents' QOL. The results of all the mean ratings (less > 3) of the perceptual items show to be positive. The lowest mean-rating item is "good for the economy" (2.08) and the highest item is "well-maintained roads" (2.95). Especially, people when think that cultural tourism is positively impacts the city's economy, the city can become an attractive and well-known place for visiting, shopping, and holding events and festivals, and

consequently create a positive destination image and community spirit. This indicates that Indianapolis respondents generally agree with the cultural tourism initiatives, believe the program can benefit the city, and support the cultural tourism development. The mean rating of residents' "overall satisfaction" is 2.19 which is also very positive, indicating that the local residents are satisfied with their QOL in Indianapolis.

Factor analysis categorized the 21 items into five factors. The means of the five factors were all under the average of three, indicating that all are perceived to be positive by the respondents. Among the five factors, Factor 2 "promotion and management of cultural tourism" received the lowest mean, indicating this factor is perceived most favorable by the respondents. Factor 5 "residents' awareness" reported the highest mean, indicating city officials need to increase efforts to raise residents' awareness of the cultural tourism initiative.

As noted above, the results of the regression analysis show three cultural tourism factors: (a) "events, festivals, and life enriching", (b) "urban attractions", and (c) "culture/transportation" had significantly positive impacts on QOL. Though this regression model explained only a small portion of the total variance (17.5%), it is understandable that residents' satisfaction with their QOL cannot largely be explained by the aspect of cultural tourism only. According to Wennergren and Fullerton (1972), residents' QOL was mainly predicted by three major indices – economic, social and environmental. This study posits and proves that development of cultural tourism also plays a significant role in determining residents' overall satisfaction with their QOL.

In conclusion, the regression model supports the assumption that development of cultural tourism has some impacts on the residents' QOL, which is consistent with previous studies. Continued improvement of public services and infrastructures and additional financial support to develop cultural tourism will result in bringing more tourists to the city, and, in turn, eventually enhance the residents' QOL. Residents may feel stress caused by demand for more public services and infrastructure during the initial stage of cultural tourism development, but will experience a better QOL during the maturity stage of tourism development (Kim, 2002). In the marketing of cultural tourism, government agencies should emphasize the positive relationship between QOL and cultural tourism. These efforts will lead the local residents to embrace and get involved in the implementation of cultural tourism initiatives.

RECOMMENDATIONS

Cultural tourism is one of the fastest-growing segments in the tourism industry. Destinations that can offer a diversified product are expected to gain an advantage. Indianapolis is responding to this trend and has already begun promoting a unique tourism product. Conventions and special events are becoming more popular, supporting the sports tourism niche that is already well-established. The emphasis is now on developing cultural tourism and capitalizing on the positive attributes in maintaining of the city's cultural identity and economic development. For city and cultural tourism planners, the principal goal is to create a strategy for minimizing the adverse impacts to city services due to the increased flow of cultural tourists and maximizing the economic gains to the entire community. This would have to include the management of cultural attractions and the quality of new developments, the uses and activities the city's infrastructure sustains, and the integration of both these factors with the economic and social needs of the city's residents.

Indianapolis has the potential to succeed as a cultural destination and maintain or improve the current QOL for its residents as long as public and private tourism service providers' work with the city planners to design, implement, and monitor an integrated quality management approach to cultural tourism. This approach must identify standards and quality labels, integrate the tourists' and residents' concerns into its core, and continue to improve the city's appeal through individual and collective initiatives.

FUTURE STUDY

In summary, this study indicated that cultural tourism had some impacts on residents' overall satisfaction with their QOL. This study also identified the significant players of cultural tourism indicators affecting people's QOL. With the continuous new development and promotion of cultural tourism in Indianapolis, further study of impacts of cultural tourism on QOL is needed. This exploratory study identified five cultural tourism factors; however, additional cultural tourism factors should be included and be explored in future studies. Lastly, this study included an on-site survey in downtown area. People who visit downtown may not represent the entire city population. Therefore, the demographics of this survey may be limited. The cultural tourism attractions and events are constantly changing, the results of this study only reflect current practice of cultural tourism in the city. Additionally, every city is different in demographics, city planning, and cultural tourism offerings. Thus, this study

may not be generalized to other cities. Future study may consider a different data collection method such as mail survey or telephone survey to reach people living in different areas of the city.

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**GENERATION EFFECTS ON JOB SATISFACTION, ORGANIZATIONAL COMMITMENT AND
TURNOVER INTENTION: A COMPARISON OF BABY BOOMER AND GENERATION X HOTEL
MANAGERS**

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ABSTRACT

While the frequently cited notion is that a number of important differences exist between Generation Xers and Baby Boomers, little research has determined how they differ and how such differences influence hospitality organizations. This study compares Generation X managers with Baby Boomers regarding their perceptions of job satisfaction, organizational climate, organizational commitment, burnout, turnover intent, and work-family culture. Results indicate that significant differences do exist between these two generations. The findings suggest that not only should hotel organizations recognize such differences and the needs of Generation X in order to retain their best managers, but that the hotel industry also should consider creating a more flexible work environment to prevent young talent from leaving the hospitality industry.

Key Words: generational differences, Generation X, baby boomers, management turnover, work-family balance

INTRODUCTION

As an area of both research and practice, the human resources area is among the focal topics within the field of hospitality management. As the hospitality industry is consistently growing globally, attracting and retaining qualified employees has become one of the most important challenges facing the industry. In the well-recognized "Top Ten Global Issues in the Hospitality Industry" released annually by International Society of Hospitality Consultants (ISHC, 2004; 2005; 2006), labor issues were ranked Number Two in 2004, and Number One in 2005 and 2006. Competition for attracting and retaining talent at all levels, from line employees to senior executives, has increasingly evolved among hotel companies, not only in the long run but also in the short term (e.g., ISHC, 2006). This competition exists not only between hospitality organizations, but also arises from non-hospitality organizations attracting well-trained hospitality personnel, often due to perceived advantages in and opportunities for work-life balance at other organizations.

As a key part of any industry's labor force, managers have received considerable attention in the literature. Extensively studied human resources topics at the management level include job satisfaction, organizational culture and climate, organizational commitment, and burnout, all of which are suggested to influence management turnover. In the workplace of hotels today, management positions are dominated by two generations: Baby Boomers (born 1945 – 1964) and Generation X (1965-1980), which have been widely recognized to have significantly different work and life values, attitudes, perceptions, needs, etc. However, little research has directly focused on such differences in the labor force of the hotel industry. The primary purpose of this study is to explore these two generations (Baby Boomer and Generation X) of hotel managers by investigating the generational differences on their perceived job satisfaction, organizational climate, organizational commitment, burnout, and turnover intent. Moreover, the managers' different perceptions of work-family culture of their respective hotels and how their work and family lives influenced each other were studied.

REVIEW OF LITERATURE

Management Turnover and Related Concepts

Management turnover is one of the most pervasive problems in the hotel industry, which has been characterized as to have a "turnover culture" (Deery & Shaw, 1997, p. 337). It has been estimated that the annual turnover rate is approximately 21 percent for management positions (Smith Travel Research, 2003). According to

Maertz and Campion (1998), there are several general reasons why individuals intend to turnover, ranging from characteristics of the job to organizational culture and climate, each of which has been shown to influence job satisfaction, turnover intent, and actual turnover rate. Previous research focused on the hotel industry also indicates that turnover is closely related to organizational commitment and burnout. Meta-analytic evidence supports positive relationships between organizational commitment and job satisfaction, organizational support, and job performance, while negative relationships exist between commitment and turnover, absence, role ambiguity, role conflict, stress, and work-family conflict (Meyer, Standley, Herscovitch, & Topolystsky, 2002).

Manager burnout results from a discrepancy between what a manager expects to achieve and what actually occurs in the workplace (Anonymous, 2002; Krone et al, 1989; Lauderdale, 1982). Burnout has three symptoms: emotional exhaustion, depersonalization, and low sense of personal accomplishment (Anonymous, 2002; Krone et al, 1989; Vallen, 1993). Research indicates that nearly 30 percent hotel managers fall into the high-burnout range, and it suggests that the managers most likely to suffer from burnout are: relatively young (under 40 years old), single or divorced, female, relatively new to management, and working in front office or food and beverage departments (Anonymous, 2002).

In the field of hospitality management, researchers suggest that the causes of management turnover also include limited career and financial advancement and work-family conflict (Stalcup & Pearson, 2001). Stalcup and Pearson (2001) reported that long working hours and regular relocation are additional reasons for turnover, but participants in their study emphasized that the primary concern regarding work time was not working too much, but not having enough time to spend with family. Research shows that managers' work interferes with their personal and social lives (Broadbridge, 1999; Presser, 2003; Sarabakhsh et al, 1989). A study based on the 1987-1994 National Survey of Families and Households indicates that nonstandard work schedules decrease marital quality (Presser, 2003). Broadbridge (1999) reveals that work stress not only reduces a manager's available time for family and social activities, but also affects the quality of a manager's time off – because even when a manager has time off, he/she often worries about work. Hotel and restaurant managers report greater interference of work with family life, and worse overall life quality than non-hospitality managers (Sarabakhsh et al, 1989).

In addition, previous research reveals clear connections between work-family issues and organizational culture. It is suggested that organizations have a unique cultural lens through which they view an employee's family life. Consequently, organizations differ significantly on the family-friendliness of the culture, or the work-family culture, as defined as "the shared assumptions, beliefs, and values regarding the extent to which an organization supports and values the integration of employees' work and family lives" (Thompson, Beauvais, and Lyness, 1999, p.394). Examination of this type of organizational culture has shown that it is positively related to utilization of work-family benefits and affective commitment, and negatively related to work-family conflict and intentions to leave the organization (Thompson et al., 1999).

Generational Differences between Baby Boomers and Generation X

A generation can be defined by demographics and key events that shape distinctive generational characteristics. While four generations (Traditionalists, Baby Boomers, Generation X, and Generation Y) are active in the workplace, Baby Boomers and Generation Xers are dominating employment in most industries in the United States, particularly in the management positions (Bell & Narz, 2007). Although the literature is not consistent on definite date ranges that define Baby Boomers and Generation X, it is generally agreed that they can be defined as persons born between 1945 and 1964 and between 1965 and 1980, respectively (Yrle, Hartman, & Payne, 2005). Specifically, in the hospitality industry, 1965-1980 was adopted by PricewaterhouseCoopers and, consequently, was frequently used by industry practitioners (Chipkin, 2006).

The characteristics of each generation contribute to defining the organizational environment and business operations. Substantial research has supported the generational differences between Baby Boomers and Generation X (e.g., Mayfield, 2002; Bell & Narz, 2007). In general, labeled as the "me generation," the Baby Boomers experienced post World War II economic growth and entered the workplace with a strong work ethic. They have seen lifetime employment; consequently they value hard work, commitment and loyalty, personal growth, simple lives, and retirement plans. Dominating the senior management positions in the past twenty years, Baby Boomers' influence is clearly reflected in organizational strategies and policies rewarding long hours and personal sacrifice for the benefit of the organization (Bell & Narz, 2007; Tulgan, 1996).

Today's workforce and society are witnessing dramatic changes with Generation Xers' values and attitudes about work gradually replacing those of aging Baby Boomers (Daboval, 1998). The life of Generation X has been shaped by global competition, television and other media, MTV, AIDS, and new technological advancements. Consequently, they value confidence, flexibility, personal time and life options (Bell & Narz, 2007; O'Bannon, 2001). Researchers have also pointed out that Generation Xers have experienced many adverse events during their formative years, such as economic downturns, increasing divorce rates of their parents, and being raised by single parents. Particularly, they have seen their Boomer parents losing jobs during downsizing and restructuring. As a result, they have become more self-reliant, less trusting, and worry little about job security. They believe job security comes from the flexibility and transferability of skills to other jobs rather than corporate loyalty and commitment (e.g., Bell & Narz, 2007; Koenigsnecht, 2002). According to Lankard (1995, p.1), Generation Xers tend "to see every job they take as temporary and every company as a stepping stone to something better, or at least to something else."

Compared to Baby Boomers, Generation Xers are reported to be more family-oriented and care more about work-family balance and quality of personal life. A survey regarding work ethic showed that approximately 80 percent of Generation Xers place active social life as a higher priority than succeeding at work (Jennings, 1999). Another study comparing family/work values of these two generations reveals that a significantly larger percentage of Generation Xers put family before work than the percentage of Baby Boomers, and the Generation X parents spend considerably more time with their children than do Boomer parents (Bell & Narz, 2000). It is suspected that such strong demand on the quality of personal life has made Generation Xers become less satisfied regarding their work environment, and consequently may result in a less favorably perceived organizational climate, which refers to employees' shared perceptions of organizational events, practices, procedures, etc. (Anonymous, 2005; Ell & Narz, 2000; Patterson and colleagues, 2005).

In the hospitality industry, intergenerational conflicts between the two generations were frequently discussed in trade and online publications, as well as at industry conferences (e.g., Atkinson, 2003; Brudney, 2006a, 2006b; Kennedy, 1999; Withiam, 2005). Previous research has revealed that hotel management jobs have certain characteristics that are known to be detrimental to family life (e.g., long and irregular hours, emphasis on face time, frequent relocation, etc.) (Harris et al, 2005). While baby boomers in the hospitality industry are familiar with these concepts, X employees (both hourly and management) have been described as the individuals who are loyal to themselves rather than the companies, and look for fewer work hours and better quality of life. It is reported that Generation Xers do not mind working hard, but they want challenging jobs along with good training and continuous feedback enabling them to consistently learn and to grow (Atkinson, 2003; Kennedy, 1999; Withiam, 2005). However, they lack patience in the waiting line of career advancement. While the previously discussed characteristics of hotel jobs have long been recognized as contributing to the relatively high turnover rate of the industry (e.g., Stalcup & Pearson, 2001), the spillover between work and family (i.e., how the work life influences the family life, and vice versa) of Generation X managers may be even more significant. For instance, Brudney (2006b) reveals that Generation X sales managers in hotels are likely to leave the hospitality industry for other industries within five years of industry tenure to better meet their life demands.

Literature suggests that a better understanding of the differences between Baby Boomers and Generation Xers is an essential key to successful human resources management in any business (e.g., O'Bannon, 2001). Considering the dominance of Boomer executives and the increasing number of Generation X managers, knowledge regarding their generational differences does not only enable organizations to develop effective human resources policies and programs, but also to promote effective communication between Baby Boomers and Generation Xers within the organization (Franz, 2004; O'Bannon, 2001). However, previous studies on generational differences have primarily focused on interviews or case studies within one organization or one location; consequently, their findings have limited generalizability. Particularly, in the hospitality industry, regardless of considerable discussions on Generation X employees, no rigorous research focusing on comparison of the two primary generations of hotel managers has been conducted. In this study, we aim to test the previously discussed notions regarding hotel Baby Boomer and Generation X managers' different perceptions of job satisfaction, organizational climate, organizational commitment, burnout, turnover intent, work and family culture and work-family interfere. Specifically, drawn from the literature as previously discussed, the following hypotheses are proposed and tested:

H1: Generation X managers perceive a lower level of job satisfaction than do Baby Boomer managers;

- H2: Generation X managers perceive a lower level of organizational climate related to the perceived efforts of the employees, pressure in the workplace, and quality of the company than do Baby Boomer managers;
- H3: Generation X hotel managers perceive a lower level of organizational commitment than do Baby Boomer managers;
- H4: Generation X managers perceive a higher level of burnout than do Baby Boomer managers;
- H5: Generation X managers have a higher level of turnover intention than do Baby Boomer managers;
 - H5a: Generation X managers have a higher level of intention to leave the hotel industry than do Baby Boomer managers;
 - H5b: Generation X managers have a higher level of intention to leave their current hotel company than do Baby Boomer managers;
- H6: Generation X managers perceive a lower level of work-family culture in their organizations than do Baby Boomer managers;
- H7: Generation X managers perceive a higher level of influence between their work and family lives than do Baby Boomer managers;
 - H7a: Generation X managers perceive a higher level of positive spillover from work to family than do Baby Boomer managers;
 - H7b: Generation X managers perceive a higher level of negative spillover from work to family than do Baby Boomer managers;
 - H7c: Generation X managers perceive a higher level of positive spillover from family to work than do Baby Boomer managers;
 - H7d: Generation X managers perceive a higher level of negative spillover from family to work than do Baby Boomer managers.

METHODOLOGY

Sample

This study is part of the ongoing Hotel Work & Well Being research project, funded by research grants from the Alfred P. Sloan Foundation and the National Institutes of Health. The Hotel Work & Well Being project aims to explore the work-family issues at all levels in the hotel industry through interviews with corporate executives, general managers, department managers, and hourly employees. While different data collection techniques have been applied to different levels of hotel managers and employees, we first interviewed hotel general managers who were identified via referrals from the Advisory Council of the Hotel Work & Well Being project, the American Hotel & Lodging Association, and the alumni network of a large, east coast university. After onsite face-to-face interviews with 35 hotel general managers, we obtained their support in contacting and surveying the other managers employed in their hotels.

The data regarding perceived job satisfaction, organizational climate, organizational commitment, burnout, turnover intent, work and family culture and work-family interaction of 526 hotel managers (excluding general managers) from 35 hotels across the United States were collected via telephone surveys. Among them 189 are Baby Boomers and 298 are Generation Xers based on the generation definitions of PricewaterhouseCoopers, resulting in a sample size of 487 hotel managers for this study. A summary of the descriptive statistics of the respondents is provided in Table 1. The sample represents several different hotel location types, including city (47.7%), suburb (15.2%), airport (15.2%), and resort (21.9%). Most major hotel companies, including Marriott, Hilton, Hyatt, InterContinental, Starwood, Kimpton, Fairmont, and Wyndham were covered in this study, including both franchised and corporate-managed units. The managers came from various of departments including food and beverage (27.9%), rooms, (19.2%), marketing (17.9%), general management (17.3%), accounting (7.4%), human resources (3.4%), recreation (2.5%), engineering (1.5%) and others (2.9%).

Variables

Analysis of covariance (ANCOVA) was conducted to examine the effects of generation on job satisfaction, organizational climate, organizational commitment, burnout, turnover intention, work-family culture, and positive and negative spillover between work and family. Each of these dependent variables was tested separately. As the focal interest of this study, generation is the predictor. Because previous studies suggest that gender may affect employee turnover intention (Twomey, Linehan, & Walsh, 2002), gender and the interaction between gender and generation are included as control variables. Moreover, it has been suggested that relatively older managers,

including Baby Boomers, may have more loyalty toward their hotels because their less committed peers had already left the hotel. Therefore, the difference of perceived organizational commitment and turnover intention between different generations may be due to unbalance comparison between two generations: one's career choices have been filtered over the years and only the loyal ones stayed (Crouter, 2007). To minimize such potentially confounding effects, we include the manager's "tenure in the hotel" as a control variable in the hotel. Last, because the 487 managers came from 35 hotels, "hotel ID" was included to control for the effects of individual hotel characteristics.

Table 1
Partial Descriptive Statistics of the Respondents

	Mean	Median	Standard Dev.	Minimum	Maximum
Age	38	37	8.44	26	60
Tenure in the hotel (years)	5.01	3.00	5.40	0.02	30.50
Tenure in the industry (years)	13.62	12.50	7.73	0.8	36.00
Number of rooms in the hotel	715	638	379	224	1908
Number of managers in the hotel	66	65	46	6	200
Number of employees in the hotel	479	405	254	105	1000

Instruments

The measurements of the dependent variables used in this study were adopted from a variety of well recognized sources. Due to the page limitations, detailed items and a scale codebook are available upon request.

RESULTS

Results of hypotheses testing are shown in Table 3. Hypotheses 1, 3, 4, 5a and 6 are supported: Generation X managers perceive a significantly lower level of job satisfaction, organizational commitment, and work-family culture than do their Baby Boomer colleagues, and the perceived level of burnout and company turnover intention of Generation X managers are significantly higher than the ones of Baby Boomers. In addition, Hypotheses 7b and 7d are supported and the results show that Generation X managers perceive significantly higher levels of negative work-to-family and family-to-work spillover.

Table 3
Results of Hypotheses Testing

DV \ IV	Generation (F value)	Gender (F value)	Hotel (F value)	Hotel Tenure (F value)	Generation*Gender (F value)
Job Satisfaction	6.069**	9.876***	1.531**	0.097	0.000
Organizational Climate	2.203	5.783*	4.092***	0.443	0.210
Organizational Commitment	5.904**	9.109***	3.013***	1.128	0.036
Burnout	12.023***	0.314	1.324	3.828*	1.203
Company Turnover Intention	8.116**	4.427*	1.600*	0.580	0.955
Industry Turnover Intention	3.585	1.628	1.220	0.019	0.007
Work and Family Culture	8.158**	1.246	2.178**	1.638	0.099
Positive Work to Family Spillover	3.370	0.524	1.212	1.082	1.786
Negative Work to Family Spillover	19.979***	0.429	1.071	0.014	1.230
Positive Family to Work Spillover	0.685	0.084	0.876	1.878	0.505
Negative Family to Work Spillover	4.964*	0.658	1.015	0.204	0.049

Note: (1) * p < .05; ** p < .01; *** p < .001.

(2) The effect of predictor "generation" on "Industry Turnover Intention" is significant at p < .10 level.

However, Hypothesis 5b is only marginally supported because the difference of industry turnover intention between Generation X and Baby Boomer is only statistically significant at the $p=.10$ level. Moreover, there are no statistically significant differences on perceived organizational climate, positive work-to-family and family-to-work spillover; therefore, Hypotheses 2, 7a and 7c are not supported. Results are presented in Table 3.

DISCUSSION

The findings of this study support the notion that Generation Xers have less satisfaction from and commitment to their jobs, while they perceive stronger burnout and are more likely to leave their companies than Baby Boomers. Job satisfaction, organizational commitment and burnout have all been extensively studied in the literature, and the relationships between them and turnover have been well established. However, taking a generation perspective, this study suggests that the traditional ways of keeping employee satisfaction and loyalty that worked with Baby Boomers may not effectively work with Generation Xers. Particularly, the significantly lower level of perceived work-family culture indicates that the work-family policies and programs currently adopted by hotel organizations are less valuable to Generation Xers than to Baby Boomer managers. One of the frequently cited reasons why Generation Xers are less satisfied and committed is that their needs of continuous learning and development are not completely fulfilled (e.g., Bova & Kroth, 2001; O'Bannon, 2001). Therefore, hotel companies are challenged continually to find ways to create motivating, enriching work environments that can be appreciated by Generation Xers.

As previous studies have revealed, a most critical component of a rewarding work environment to Generation Xers is an enhanced balance between job and family. Management jobs in the hotel industry have been recognized for having characteristics known to be detrimental to family life (e.g., long and irregular hours, frequent relocation, etc.) (Harris et al., 2007). In fact, Presser (2003) found that lodging management is one of the U.S.'s top ten occupations with nonstandard work schedules, as well as the highest percentage of working varying shifts and weekends. Promisingly, it is reported that several hotel companies have implemented policies and programs to address work and family issues. Enz and Siguaw (2000) found that among companies using a number of family-friendly practices, employee satisfaction increased, turnover rate reduced, and productivity increased. It should be realized that Generation X is not the only generation yearning for family-friendly benefits. Although Baby Boomers seem to have more tolerance with their current work environment than the Xers, they also have a keen interest in family-friendly programs. Recent research suggests that, rather than viewing family-friendly practices as a liability, hotel companies should recognize that these practices have potential strategic advantages for them (Harris et al., 2007). Because only a few hospitality organizations appear to have embraced family-friendly approaches to organizing work, implementing family-friendly policies and practices and changing to a family-friendly culture could enable hotel organizations to gain competitive advantage through reduced absenteeism, reduced turnover, and better retention and productivity of employees (Crouter et al., 2004; Harris et al., 2005).

This study reveals that Baby Boomers and Generation Xers have similar rather than different perceptions regarding their hotels. Specifically, there is no difference between Baby Boomers' and Generation Xers' perceptions regarding the effort which their colleagues put in the work, the importance of quality, and the work pressure from the hotels. This result indicates that Generation Xers understand their work environment at least as well as their Baby Boomer colleagues. Consequently, their perceived different levels of job satisfaction, organizational commitment, burnout, and work-family culture do not appear to be due to the lack of knowledge of their organizations or jobs. Indeed, this finding provides further support to validate generation effects: with similar understanding of the work environment, it is more likely that it is the distinct characteristics of each generation that cause the different levels of job satisfaction and organizational commitment.

Whether Baby Boomers lack of loyalty to the hospitality industry is one of the most pressing questions among hospitality researchers and practitioners. This study only found a statistically marginally significant difference between Baby Boomers' and Generational Xers' intentions of leaving the industry. Rather, a significant difference exists in their intention to leave their respective hotel companies. Such finding suggests that generational characteristics play a relatively less vital role in preventing good managers from quitting the industry versus individual hotel organizations. It is important to point out that "hotel" is statistically significantly related to the managers' perceptions regarding job satisfaction, organizational climate, organizational commitment, company turnover, and work-family culture. That is, the managers of some hotels perceive significantly higher job satisfaction, organizational climate, organizational commitment and work-family culture as well as lower intention to leave the

company than the managers of the other hotels. Therefore, it is clear that, although differences do exist between generations, such generational differences do not affect all hotels equally. The results of this study have shown that individual hotels and companies can reduce the managers' intention of leaving the company and improve their satisfaction and commitment to the company. As previously discussed, literature suggests that among the most successful strategies are flexible work arrangements that lead to a better balance between work and family lives (e.g., Anonymous, 2005; Bell & Narz, 2007; Enz & Siguaw, 2000).

It is interesting that the work-family interfere perceived by hotel managers shows different patterns on positive and negative influences. While no difference was found on the positive influences between hotel managers' work-family lives, Generation Xers report higher negative spillover between work and family lives than do Baby Boomers. A resulting question is why do negative events occurring at work or family have stronger effects on Generation X managers' family or work lives than on Baby Boomer's? One possible explanation may be maturity. As many Generation Xers are still in their late 20s or early 30s, their skills of self-control and handling stress may not have been developed as thoroughly as those of Baby Boomers. Moreover, as Generation Xers and Baby Boomers are going through different life stages, they are facing different issues at work and family. While many Generation Xers may be struggling with switching jobs and starting and raising families, more Baby Boomers may have already gone through those dramatic job and personal life changes and have relatively more stable jobs and families. Previous studies have suggested that consistent mentoring, coaching and feedback from senior management are critical to the success of Generation Xers (e.g., O'Bannon, 2001).

CONCLUSIONS AND LIMITATIONS

In conclusion, our research suggests that generational differences do exist between Generation X and Baby Boomer hotel managers. Specifically, compared with Baby Boomers, Generation Xers perceive lower levels of job satisfaction, organizational commitment and work-family culture. In addition, higher intention to leave the company, higher levels of burnout and negative spillovers between work and family are reported by Generation X managers. Since a central theme among Generation Xers is the struggle between work and family time (O'Bannon, 2001), a family-friendly work environment will be particularly valuable to the managers, the organizations and the industry. While the results of this study have not established a concrete link between the generation factor and managers' intention of leaving the hotel industry, it is important to realize that hotel organizations should recognize such differences and the needs of Generation X in order to retain their best managers, and the hotel industry also should consider creating a more flexible environment to prevent young talent from leaving to other industries.

As with any research, the results of this study should be interpreted with qualifications. First, this study only attempts to answer the question of "whether there are differences between Generation X and Baby Boomer managers regarding their perceptions on a number of chosen constructs". However, it is established in the literature that many of these constructs are correlated, such as the relationships between turnover, job satisfaction, organizational commitment, and burnout. Future research on whether and how the generation factor affects the relationships between these constructs will provide a more informative picture regarding the generation topic. In addition, to recruit a sufficient number of managers from each hotel, managers of limited-service hotels were not included in this study. As limited-service hotels may have different requirements, challenges and culture for the managers than full-service hotels, the results of this study may not be generalizable to the limited service segment. Lastly, literature has revealed that generation effects may vary in different cultures (e.g., Chen, 2007). While it is beyond the scope of this study, future research on the generation effects in non-American culture and then comparing the results in different cultural settings will be particular interesting.

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THE ROLE OF HOTEL OWNERS: THE INFLUENCE OF CORPORATE STRATEGIES ON HOTEL UNIT PERFORMANCE

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ABSTRACT

The purpose of this empirical study is to examine corporate effects in the lodging industry from a hotel owner's perspective. Four corporate strategies are proposed as relating to hotel property financial performance and generated by hotel owner core competencies. The findings strongly support the existence of corporate effects and the influences of corporate strategies on hotel unit financial performance. Specifically, a hotel owner's expertise in implementing superior strategies regarding segment, brand, operator, and location (i.e., MSA) are critical to hotel unit financial performance. This study also suggests that the collective influence of multiple corporate strategies has a significant effect on a hotel's financial performance.

Key Words: corporate strategy; hotel owner; hotel performance

INTRODUCTION

Literature regarding strategic management typically distinguishes between business and corporate strategies. Business strategy deals with the ways in which a single-business firm, or an individual business-unit of a large firm, competes within a particular industry or market, while corporate strategy deals with the ways in which a corporation manages a set of businesses together (Bowman & Helfat, 2001). The relative importance of business-unit factors in determining performance differences of business-units between firms has been widely documented, and the literature has revealed that industry plays a critical role in affecting business-unit profitability. However, previous research has produced mixed results regarding the influence of corporate-parent, or corporate effects, on business-unit performance. While it is suggested that the influence of corporations on business units may vary in different industries, little empirical research has been conducted to examine the magnitude and the sources of corporate effects within specific industries.

In the field of hospitality management, previous studies on corporate-level strategies have primarily focused on topics of branding, franchising, internationalization, and leadership, and little hospitality strategy research has been conducted on one of the most important dependent variables of strategic management – financial performance (Okumus, 2002; Tse & Olsen, 1999). Although a few recent studies have sought to compensate for this limitation and have revealed that hotel firms' and/or owners' strategies regarding branding, franchising, and service may have significant effects on hotel financial performance at both the corporate-level and the property-level (O'Neill & Mattila, 2006; O'Neill & Xiao, 2006), there is no known comprehensive research that incorporates and focuses exclusively on multiple hotel strategy and/or competence constructs.

Moreover, little attention in the literature has been given to the perspective of hotel owners. Industry practitioners have long argued that hotel owners play critical roles in the lodging industry, and they implement different strategies to improve the performance of their hotels. Despite a large number of articles and discussions regarding the importance of hotel owners found in industry trade magazines and at industry conferences, little has been studied with regard to the effects of hotel owner corporate-level strategies on property-level performance. Specifically, whether or not corporate effects exist in the lodging industry and how hotel owners' corporate-level strategies affect property-level performance remain unknown. Answers to these questions are of great importance because they can improve our understanding regarding the role of hotel owners in the lodging industry.

The objective of this research is to complement existing research in corporate effects and hospitality strategic management by studying the corporate effects in the lodging industry from a hotel owner's perspective. Specifically, this study addresses the following two research questions: (1) Do corporate effects exist in the lodging industry? and (2) Can a hotel owner's corporate effects on property financial performance be attributed to the owner's strategic decisions regarding choice of hotel location, segment, brand, and/or operator?

LITERATURE REVIEW

Corporate Effects

Financial performance of a firm or the business-unit of a firm has been one of key dependent variables in strategic management research (e.g., Olsen, 1999; 2004). Strategic management researchers have sought to assess the relative importance of business-unit, corporate, and industry factors in determining performance differences of business-units between firms. While industry and business-unit effects have been widely documented as major factors explaining large portions of the variance in business-unit profitability, previous research has produced mixed results regarding the effects of the corporate-parent (Bowman & Helfat, 2001). While no evidence of corporate effects were reported by Schmalensee (1985), a number of studies have reported the relative importance of corporate effects (e.g., McGahan & Porter, 1997; Rumelt, 1991; Roquebert, Phillips, & Westfall, 1996). However, such corporate effects may range from 1.6 percent (Rumelt, 1991) to 17.9 percent (Roquebert et al., 1996). Measuring business-unit performance with market share, a study by Chang and Singh (2000) indicates that corporate effects can range from 2.4 percent to 7.6 percent.

Among the factors suggested that lead to the inconsistency of estimated corporate effects, researchers have found that the effects of the corporate parent differ for companies in different industries. McGahan and Porter (1997) report that corporate parent effects are substantially larger for non-manufacturing companies (e.g., agriculture, transportation, services) than for manufacturing companies that were analyzed in the studies of Rumelt (1991) and Schmalensee (1985). Due to the considerable limitations of prior studies, researchers suggest that most results of corporate effects studies should only be interpreted strictly within the context of their samples (Bowman & Helfat, 2001). Consequently, more research is needed to disclose the specific corporate effects of companies in unstudied industries, including the lodging industry.

Literature in strategic management has suggested a number of corporate-level factors that affect profitability, including scope of the firm, core competencies, organizational structure, organizational climate, planning and control systems, and corporate strategies (Bowman & Helfat, 2001). Specifically, Bowman and Helfat (2001) suggest that, theoretically, corporate strategy is a subset of total corporate effects on profitability, and corporate strategies that affect these corporate-level factors are believed to influence the firm's profitability.

Strategic management researchers agree that strategies are the results of the strategic analysis of an organization, which systematically investigates the organization's external environment and its internal context (e.g., David, 2001; Mintzberg, 1990). Specifically, from a resource-based view of the firm, corporate strategies are considered from an internal perspective, and previous studies have revealed that analysis of internal resources can enable firms to determine their potential or realized sources of competencies and capabilities, and a firm can achieve competitive advantage if its resources are inimitable by its competitors (e.g., Barney, 1991). According to Barney (1991), firm resources include all assets, capabilities, organizational processes, knowledge, etc. that are possessed by a firm and can enable a firm to develop and implement strategies that improve performance.

Corporate Strategy in the U.S. Lodging Industry

In the hotel industry, there are different corporate players, such as franchisors, management companies, and hotel owners (individual or institutional). In many cases, those who invest in hotels are not the operators who manage the hotels. While most hospitality research related to strategic management has focused on the strategies of either properties or franchisors and management companies, such as branding, franchising, and internationalization (e.g., Dev et al., 2002; Tse & Olsen, 1999; Olsen, 2004), little attention has been given to the corporate strategies of the hotel owners. As a group, hotel owners own over ten percent of all commercial real estate in the United States, and hotel owners and investors are among the most essential and active stakeholders in the lodging industry (Corgel, 2005).

Similar to the owners of other types of commercial real estate, hotel owners are concerned about the performance of their hotels, because the market value of a hotel is closely, although not perfectly, related to its operating performance (e.g., Corgel, 2005). Although the role of hotel owners in influencing the performance of their properties remains unknown, literature regarding other types of commercial real estate suggests that corporate offices can affect property-level performance (Capozza & Seguin, 1998). Therefore, Hypothesis 1 is proposed to study the effects of hotel owners on their hotels:

Hypothesis H1: The financial performance of hotels owned by certain owners is superior to the financial performance of hotels owned by other owners.

As a profit-driven entity, hotel owners buy/sell/develop hotel properties to seek acceptable return on investment. The link between a hotel property's market value and the hotel's financial performance indicators, including ADR, occupancy rate, and net operating income (NOI), has been well established (e.g., O'Neill, 2004). Therefore, it is reasonable for non-operating hotel owners, both individual and institutional, to implement relevant strategies to maximize the financial performance of hotel properties. Specifically, from a hotel owner's perspective, a non-operating hotel owner can generally make significant, corporate-level strategic decisions regarding: (1) at which location(s)/market(s) to possess a property/properties, (2) which type(s) of hotels to possess, (3) whether to affiliate with hotel brand(s), that is, whether to obtain brand(s) for their properties, and with which brand(s) to affiliate, and (4) which operator(s) (management company/companies) will be retained to operate the property/properties.

While the effects of a superior hotel location on the profitability have been well recognized by hotel owners (e.g., Imperiale, 2002), previous research has also suggested the performance of different hotel types may vary in different time periods. It is suggested that limited-service hotels are less affected by an unfavorable economic environment than full-service hotels because of their relatively lower fixed costs; while in a favorable economic environment, limited-service hotels can be affected more quickly by the new supply than full-service properties, because the development cycle of limited-service hotels is much shorter (Imperiale, 2002). A recent study conducted by O'Neill and Mattila (2006) supports this argument by revealing that the most profitable hotel type in 2003 was the economy segment. Based on the findings in the literature, one could argue that, some aggressive hotel owners seeking return maximization may like to acquire luxury and upscale hotels if they foresee promising economic growth, some owners seeking risk minimization may tend to acquire limited-service properties if they expect economic downturns, while other owners may diversify their hotels in different segments to seek balanced return and risk in the long-term. However, research is lacking for the topic of hotel owner's strategic decisions on their favorite hotel type(s).

Moreover, Corgel (2002) reported that, in the hotel investment community, the conventional wisdom holds that superior return on hotel investment cannot occur without brand affiliation and superior management. Among a number of benefits of brand affiliation is the positive influence on hotel sales and profitability (e.g., Hayes & Ninemeier, 2007). Literature also suggests a link between brand and hotel value indicators such as ADR, occupancy, RevPAR, NOI, and hotel sale price (e.g., O'Neill & Mattila, 2006; O'Neill & Xiao, 2006). However, the only empirical study focusing on the effects of brand affiliation and hotel operator does not reveal a significant relationship between investment return and the combination of management and brand affiliation (Hanson, 1991).

Furthermore, it is well agreed that the financial success of a hotel depends, in large measure, on the quality and skill of its onsite operator (e.g., Hayes & Ninemeier, 2007). Hotel operators, or management companies, can be classified in different ways. A common classification is first-tier and second-tier operators, which also refers to branded managers and non-branded managers (e.g., Hayes & Ninemeier, 2007). The first-tier operators, or branded managers, are the hotel companies that operate hotels for owners using their respective hotel brands, while the second-tier operators operate hotels but do not have a recognized hotel brand. Historically, the management contracts between hotel owners and operators heavily favored management companies. However, since the mid-1980s, relative bargaining power began to shift to favoring the owners due to increasing competition among operators, increasing owner sophistication and experience in the hotel business, and consequently increasing transparency of operating information (e.g., Eyster, 1996). From the perspective of the owner-operator relationship, hotel owners can influence their hotels' operators significantly through different asset management skills, and many

hotel owners have explicitly claimed that such capability of monitoring the operators is an important core competency (e.g., Strategic Hotel Capital, 2006).

To summarize, although hotel owners may not operate their hotels directly, they can influence their properties indirectly through various strategies in choosing location(s), segment(s), brand(s), and operator(s). Therefore, these four corporate-level strategies are proposed as potential sources of corporate effects as specified in Hypothesis 2:

Hypothesis H2: The financial performance of a hotel is associated with its owner's strategies regarding (1) location, (2) segment, (3) brand affiliation, and (4) operator.

METHODOLOGY

Sample

The sample for the subject study was provided by Smith Travel Research (STR). The overall time frame of the study covered a three-year period between 2003 and 2005. To effectively test the proposed hypotheses, annual data regarding the following variables were analyzed for each hotel between 2003 and 2005: **Revenue Per Available Room (RevPAR), Net Operating Income (NOI), hotel age, hotel size (i.e., number of rooms), room price level, location (i.e., state), segment, brand affiliation, operator, and owner.** The sample consisted of a total of 2,012 hotels with data regarding RevPAR, number of rooms, hotel age, room price level, location (state), segment, brand affiliation, operator, and owner in 2003, 2004, and 2005. Among the 2,012 hotels, 684 hotels also provided NOI information. To use the largest available sample, The 2,012 hotels (6,036 cases) form the base sample – Sample A, while the 684 hotels form Sample B. Sample A is used to test the models in which the dependent variable is RevPAR, while Sample B is used to test the models with NOIPAR as the dependent variable. It should be noted that, to ensure confidentiality, the information regarding owner, brand, and operator is coded by assigning a unique number to each owner, brand, and operator, and the actual names are not disclosed.

Variables

In this study, the dependent variable “hotel property financial performance” is operationalized as two separate measures: the revenue indicator RevPAR and the profit measure NOIPAR, both based on the data provided by STR. The predictors include owner, location (state), segment, brand affiliation and operator. Overall corporate effects are examined based on the ownership of the hotels. In Sample A consisting of 2,012 hotels, there are a total of 159 hotel owners, whose hotels are located in 51 states (including Washington, D.C.), are affiliated with 90 brands, and are managed by 195 different operators. In Sample B, there are 106 owners, 49 states, 68 brands, and 121 operators. Moreover, hotel segment is determined based on the STR chain scales, classifying all hotels into one of the six segments: luxury, upper upscale, upscale, midscale with food and beverage (F&B), midscale without F&B, and economy. In addition to the independent variables, literature has suggested several other factors that may affect hotel financial performance, and consequently, these variables are controlled in this study: year, hotel size, hotel age, and room price level (the relative standing of a hotel's room price compared to its competitors as identified by STR).

Statistical Procedure

Literature has established that variance components analysis (VCA) is the most appropriate statistical method to examine corporate effects (e.g., Bowman & Helfat, 2001). As a technique used to apportion variance in a continuous dependent variable across a number of independent variables, VCA is commonly used in strategic management research involving comparisons of the relative influence of various factors on firm performance (e.g., Chang & Singh, 2000; Crossland & Hambrick, 2007; McGahan & Porter, 1997; Schmalensee, 1985; Rumelt, 1991). Therefore, random-effect VCA is applied in this study with the SAS Package Version 8.

RESULTS

Hypothesis H1 is tested on Sample A (RevPAR as the dependent variable) and Sample B (NOIPAR as the dependent variable). The results of the random-effects VCA procedure, presented in Table 1 (see next page), reveal that the owner explains the largest portion of variance in hotel RevPAR and NOIPAR (71.54 percent and 40.74 percent, respectively). Therefore, Hypothesis H1 is supported.

To test Hypothesis H2, the four proposed corporate strategies are included in the VCA model. As shown in Table 2, the results show that, a hotel owner's strategies regarding its hotels' locations, segments, brands, and

operators do contribute to the owner's corporate effects because they all explain some variance in hotel RevPAR and NOIPAR.

Specifically, among the four corporate strategies, segment explains the largest portion of variance in hotel RevPAR (33.23 percent), followed by brand (11.21 percent), while operator and location (state) make less significant contributions in explaining the variance of RevPAR. Regarding the effects on NOIPAR, brand and segment are still the two most important factors, but the order is changed: Brand is the number one predictor (26.52 percent), followed by segment (19.96 percent).

Table 1
Effects of Owner

	Sample 1-A <u>DV = RevPAR</u>	Sample 1-B <u>DV = NOIPAR</u>
<i>Variable</i>	<i>Variance Percentage</i>	<i>Variance Percentage</i>
Year	1.10%	0.93%
Age	4.83%	20.11%
Hotel Size	7.14%	23.77%
Room Price Level	5.62%	2.58%
Owner	71.54%	40.74%
Error	9.77%	11.86%
Total	100.00%	100.00%

Moreover, it is indicated that additional strategies of the owner may influence the performance of its hotels, because these four strategies could not fully explain the variances in RevPAR and NOIPAR attributable to the owner, although such variances are reduced from 71.54 percent and 40.74 percent (when these four strategies are not taken into consideration) to 21.39 percent and 18.68 percent (after taking into account these four strategies), respectively. These results support the notion in the lodging industry that hotel owners do implement multiple strategies to influence their hotels.

Table 2
Effects of Corporate Strategies

	Sample 1-A <u>DV = RevPAR</u>	Sample 1-B <u>DV = NOIPAR</u>
<i>Variable</i>	<i>Variance Percentage</i>	<i>Variance Percentage</i>
Segment	33.23%	19.96%
Location - State	1.19%	2.51%
Brand (nested in Segment)	11.21%	26.52%
Operator	5.60%	3.92%
Owner	21.39%	18.68%
<u>Control Variable</u>		
Year	0.64%	0.73%
Age	0.91%	0.92%
Hotel Size	1.28%	0.88%
Room Price Level	4.81%	5.23%
Error	19.74%	20.65%
Total	100.00%	100%

DISCUSSION

The findings of this study confirm the existence of corporate effects in the lodging industry. Compared to other factors that are well recognized in the literature as related to a hotel's financial performance such as hotel size, hotel age, price level, and time (i.e., year), the owner is indeed the most significant factor in that it accounts for the largest variance of a hotel's financial performance. This study supports the previous research suggesting that the effects of corporate parent may be substantially larger in some industries, such as the non-manufacturing industries, than in others (McGahan & Porter, 1997). This finding reveals that, in addition to franchisors and management companies that are commonly considered as influences on a hotel's performance, hotel owners also play a critical role, in that they not only buy and sell hotels but also have significant influence on their individual hotels' financial performance.

This study indicates that the owner's corporate strategies are significantly related to hotel financial performance. This finding supports the previous research suggesting that corporate strategies are part of total corporate effects (Bowman & Helfat, 2001). Specifically, in the lodging industry, a non-operating hotel owner can choose strategies regarding: (1) at which location(s) to possess a property/properties, (2) which type(s) of hotels to possess, (3) what brand(s) to affiliate with, and (4) which operator(s) will manage its property/properties. The relative importance of these strategies on hotel performance is assessed in this research. Because hotel segment is defined by a hotel brand's system-wide ADR and consequently is directly linked to RevPAR, its significant prediction power on RevPAR is not surprising. In addition, the importance of location has been long recognized for a long time in the lodging industry. Particularly, from a hotel owner's viewpoint, it is suggested that a hotel investment is only as good as its local market, because the revenues of a hotel are highly correlated to the economy of the local market (Corgel, 2002).

An important finding of this study is the critical role of brand affiliation, which explains a large portion of variance in both RevPAR and NOIPAR. Literature on branding and brand equity has suggested that a good brand is valuable not only to the brand owner (e.g., franchisors) but also to the brand user (e.g., franchisees) and the ultimate customers of the product (e.g., Kim et al., 2002; Prasad & Dev, 2000). Taking a hotel owner's perspective, brand names are relevant to hotel revenue, profit, and return on investment (e.g., Prasad & Dev, 2000). A study of Kim et al. (2002) on 12 upscale hotel brands revealed that a strong brand can contribute to hotel RevPAR through increased brand image, brand awareness, perceived quality, and brand loyalty. Moreover, a recent study has shown that brand affiliation contributes significantly to a hotel's market value, and certain brands have greater influence on hotel valuations than other brands (O'Neill & Xiao, 2006). While the actual brand names were not made available for this research, results of this study support such a view of "brand power" by revealing that some brands have achieved higher RevPAR and NOIPAR levels than others across hotel owners.

While the significant effects of segment, location, brand, and operator on hotel performance is widely acknowledged, from a hotel owner's perspective, how they choose the superior segment, location, brand, and operator strategies is worth further scrutinizing. To further investigate the effects of these four identified strategies, we ranked all owners, locations (states), segments, brands, and operators based on the achieved RevPAR and NOIPAR. We identified one group of sixteen hotel owners (ten percent of the 159 owners in the base sample) achieving the highest RevPAR and NOIPAR, and another group of sixteen owners with the lowest RevPAR and NOIPAR. As shown in Table 3, the segments, locations, brands, and operators between the hotels of the top sixteen and the ones of the bottom sixteen owners were compared, and the results suggest that the better hotel owners are selective in implementing their segment, location, brand, and operator strategies. First, the top sixteen hotel owners focus more on owning luxury, upper upscale, and upscale hotels than the bottom sixteen hotel owners, who do not own any luxury hotels but concentrate more on midscale and economy properties. Second, while the 156 hotels of the sixteen better-performing hotel owners are in 27 states, nearly 59 percent of them are located in the top five states: California, Florida, New York, Virginia, and Illinois. Comparably, the sixteen under-performing owners have concentrated their hotels in five different states: Ohio, North Carolina, Arizona, Indiana, and Georgia.

Furthermore, 83 hotels (53 percent) of the best-performing owners are affiliated with only five brands regardless of a total of 30 brands in this sub-sample. Noticeably, only one of these five brands (Brand 2) is adopted by the under-performing owners. Finally, while 31 operators are retained by the sixteen best-performing owners, 86 hotels (55 percent) are managed by only five operators, and none of these five operators are retained by the under-performing owners. Although the actual names of hotel brands and operators are not available, one potential

interpretation of these results is that the best-performing owners have realized/achieved the power of certain segments, locations, brands, and operators, and consequently they have adopted their strategies accordingly, seeking to make their hotels associate with certain “better” segment(s), location(s), brand(s), and operator(s).

Moreover, it is worth noting that segment, location, brand, and operator strategies often work together rather than separately, particularly in projects of new hotel development and also in hotel acquisitions. For an existing hotel, change in one factor may cause change in another factor, such as that shown in the relationship between brand and operator. In addition, a hotel owner’s decision regarding quality and facility upgrading or downgrading may also involve changes in brand and/or segment. Therefore, multiple strategies are often adopted simultaneously and a hotel’s performance depends on these collective effects. Therefore, hotel owners should not overly rely on one particular strategy and ignore the potential effects of the others.

CONCLUSIONS AND LIMITATIONS

The purpose of the study is to explore corporate effects in the lodging industry from a hotel owner’s perspective. To the best of our knowledge, this study is the first of its kind to examine the concept of corporate effects in the context of the hospitality industry, and consequently adds value to hospitality management research. This research expands the strategy research in the hospitality field by linking two key strategy constructs – corporate effects and corporate strategy together and by revealing their collective influence on hotel performance. This study concludes that corporate effects do exist in the lodging industry. Compared to other factors such as hotel size, hotel age, price level, and time (i.e., year), the owner is indeed the most significant factor in determining a hotel’s financial performance. Hotel owners play a crucial role in influencing the performance of their hotels. Moreover, this research expands the literature on corporate effects by examining the underlying sources of corporate effects. Study findings indicate that corporate strategies can be effective sources of corporate effects because a hotel owner can influence its hotels through implementing certain corporate strategies, while the degree of importance may vary by strategy. Specifically, an owner’s strategic decisions regarding segment, brand, location and operator are important factors that influence both the revenue and profit of hotels.

Several limitations are associated with this study and provide directions for future research. First, corporate strategy is a focal factor examined in this research. However, corporate strategy only represents one source of corporate effects, while literature has suggested a number of other potential sources of corporate effects, such as organizational structure, organizational climate, planning and control systems, etc. (Bowman & Helfat, 2001). Second, although the STR database is the largest available in the lodging industry, it does not disclose the actual names of the owners, brands, and operators, which in turn limits the interpretation of the results. A particularly interesting question for future research is: Which owners, brands, and operators are superior or inferior to others? Third, this research focuses on the operating performance of hotels, measured as RevPAR and NOIPAR, but does not take into consideration the value or investment of the hotels. A hotel’s operating performance (i.e., RevPAR and NOIPAR) is related to the owner’s investment in the particular hotel. While a hotel’s operating performance is essential to its value, one of the ultimate goals of hotel owners is to achieve superior, or at least acceptable, return on investment. Future research linking hotel owners’ strategies to their desired and/or realized return on investment will be particularly valuable to the hotel investment community.

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EXPERIENTIAL VALUES FOR CASINO HOTELS IN MACAO

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ABSTRACT

Casino hotels have traditionally been viewed as commodities competing over price and complimentary rooms. Researchers appeal for experience as differentiation strategy and state that unique experiences translate in the success of hotels. Based on previous studies in other industries on experiential values, this study aims to explore experiential values applicable to casino hotels that can be used to market the hotels in terms that go beyond the traditional mix of price and complimentary rooms. Dimensions of experiential values are tested for their applicability in Macao's casino hotels against consumers' hotel preference, patronage intent and willingness to recommend to others.

Key Words: casino hotel, experiential values

INTRODUCTION

Casinos have been one of the fastest growing entertainment products of the past decade internationally, particularly in the merging market of Macao. Currently there are thirty-one casino operations in Macao with four more under construction. Casinos generated \$10 billion in Macao in 2007, an increase of almost fifty percent over the 2006 figures and surpassing Las Vegas for the first time. Furthermore, visitor arrivals increased to more than 27 million people reflecting a close the twenty-five percent increase over 2006.

Visitor's aspiration for gaming as an entertainment alternative has sustained the casino hotel growth. Hotels create an ability to extend the marketing reach of the casino beyond the local population. Packaged with food, beverage and/or entertainment offerings a casino hotel visit can be transformed into a weekend or other short-term getaway. The hotel supply in Macao has increased at a relatively modest rate since the mid/late 1990s. However, the number of hotels built in association with, or to support a casino, is growing dramatically.

As the number of casinos continue to grow, so does the need to differentiate one hotel from another, a process traditionally addressed through the addition of non-gaming amenities such as restaurants and bars, retail outlets and entertainment offerings. Traditionally casino hotels were featured as commodities whereas competition was targeted on such things as price, room amenities and giving away complimentary rooms to valued guests. Consumers are confused about the values and benefits each hotel offers when faced with similar products. Potential casino hotel guest pick a location based on room rate or for simple amenities such as the inclusion of breakfast, making it hard for hotels to compete on the functional offerings. Casino hotels are under the risk of losing their identity. In this context, researchers appeal to brand experience as a competitive edge and advocate creating unique and memorable brand experiences in terms that go beyond the traditional mix of price and complimentary rooms.

RESEARCH QUESTIONS

Given the significance of experience as a future competitive strategy, there are few studies conducted delineating the experiential values in the casino hotel industry. This paper is one of a series of hotel experiential

studies conducted by the authors in their attempt to fill this research gap. To this end, the study bears the following objectives:

- 1) Examining the applicability of experience in casino hotel industry as a differentiation strategy that goes beyond the price and the practice of offering free guestrooms;
- 2) Investigating the effect of the dimensions of experience on customer attitudes and behavioral intentions;
- 3) Facilitating experiential marketing of casino hotels in Macao.

Specifically, this paper answers the following questions: 1) What experiential values do customers look for when they stay at casino hotels? 2) What experiential values generate positive brand attitudes and brand preferences?

LITERATURE

Casino hotels are categorized as those establishments where the income from casino operations represents more than 50% of their total revenues (Jang & Yu, 2002). In a consumer behavior study among Macao casino users, Desmond (2005) found that the top reason for people to go to casinos is the opportunity to beat the house and win. In addition to the fun and excitement of winning, the interaction and company of others enhances the entertainment and excitement values of using casinos. In the same study, it is proved that many casino guests seek entertainment value from the casino experience. People go to casinos for the holistic experience that provides fun, excitement, entertainment and social interaction.

Experience

According to consumer behavior researchers, experience has become a key element in understanding consumer behavior (Addis and Holbrook, 2001) and marketing of the future (Schmitt, 1999; LaSalle and Britton, 2003). Experiential study bears particular significance to today's market when industries are saturated with brands and consumers are lost in the sea of similar products. Carbone and Haeckel (1993) define experience in the economic setting as the take-away impression formed by people's encounters with products, services, and businesses – a perception produced when humans consolidate sensory information. Holbrook and Hirschman (1982) understood an experience as a private event that occurs as a reaction or a response to some environmental stimulation, which is often the result of direct observation of, or participation within, particular events. Experiences provide customers a way to engage physically, mentally, emotionally, socially and spiritually in the consumption of the product or service making the interaction meaningfully real (McCann-Erickson, 2002).

Strategies on relating with customers and creating relevant unique experiences become a critical issue for casino hotel businesses in the experience economy. Great experience establishes an emotional bond between companies and customers that are difficult for competitors to break. The emotional bond with customers creates a virtuous cycle that reinforces and ultimately characterizes great brands. Hotels in the casino segment likewise have the capacity to relate with customers and elevate their brands to a distinctive emotional level.

Experiential Values

The consumption experience can be rich in values. Researchers have used various dimensions to define experiential values and their benefits. According to Mathwick et al. (2001) experiential value is the customers' perception based upon interactions involving either direct usage or distanced appreciation of goods and services. These interactions provide the basis for the relativistic preferences held by the individuals involved (Holbrook and Corfman, 1985). Sheth, Newman and Gross (1991) stated that the value that motivates consumer behavior has functional, conditional, social, emotional and epistemic utilities. Pine and Gilmore (1998) postulated that experience generates values in the realms of 4Es, namely, *education*, *entertaining*, *escape* and *esthetic*. Other researchers categorized the experiential values as those offering intrinsic and extrinsic benefits (Babin and Darden, 1995; Batra and Ahtola, 1991; Crowley, Spangenberg and Hughes, 1992; Mano and Oliver, 1993). The intrinsic benefit is from starting and finishing a task or a job, while the extrinsic benefit comprises the pleasure and happiness of a process (Babin, Darden and Griffin, 1994).

Besides the traditional practice of providing basic values in price and service quality, companies can also provide values through elements such as environment factors. Many researchers postulated that different environment factors induce different customer responses to the experience. These factors include music (Areni and Kim, 1993; Hui, Dube and Chebat, 1997), color (Bellizzi, Crowley and Hasty, 1983), and smell (Spangenberg,

Crowley and Henderson, 1996). Through the use of scents, sounds and tactile elements, a deeper emotional connection to the business is expected to be established. Businesses must use the environment factors to symbolize a promise that people believe can be delivered and one they desire to be part of. The strategically integrated factors of lodging experience generate value propositions for casino guests. In turn, guests exhibit their response to those value propositions by demonstrating positive attitudes for the casino, such as preference for the casino over others, patronage intent and willingness to pass positive word-of-mouth.

Theoretical Framework and Hypothesis

The experiential value dimensions proposed by Holbrook (1994) and Pine and Gilmore (1998) served as the source of experiential value scales and laid the conceptual foundation for generating experiential value items. The proposed experiential values have been primarily validated in various service studies, such as in retail shopping (Mathwick, Malhotra and Rigdon, 2001) and pharmaceutical experience (Suchanti, 2005). The values have been found contributive to positive consumer attitude and behavior. Nonetheless, few of them were holistic in nature to include all scales in the experiential construct and dimensions. Moreover, the scales have seldom been administered to the casino hotel industry. Table 1 presents the definitions of each experiential subscale, the content of the subscales and the source of the items for the subscales.

Table 1
Definition, Measurement, and Item Source of Each Concept

<i>Experiential subscales</i>	<i>Definition</i>	<i>Measurement</i>	<i>Item source</i>
Esthetics	Awareness of beauty, sensory appeals	Overall design and look, music, color, aroma	Holbrook (1994), Pine & Gilmore (1998), Schmitt (1999)
Entertainment	Playful, joyful, enthusiastic, easy, fun	Joyful, entertaining experience, pure enjoyment of using the products/services	Holbrook (1994), Pine & Gilmore (1998), Rosenbloom (2003), Schmitt (1999), Swartout & Van Lent (2003)
Escape	A sense of “get-away”, “forget-it-all”	Peacefulness, relaxation, immersion into another world, fulfillment	Pine & Gilmore (1999), Schmitt (1999)
Enjoyment	Internal joy	Fun, excitement	Schmitt (1999)
Efficiency	Productivity, convenience	Efficiency for managing trip, easier life when traveling, flexible schedule	Catalog Coalition (1993), Holbrook (1994)
Excellence	Quality, fitness for use	Consistently good quality, service experts, helpful employees	Brady & Cronin (2001), Holbrook (1994)
Economic value	Good value for money	Price relative to the market	Holbrook (1994), Schmitt (1999)
Social recognition /interaction	Reputation, social image, self-esteem, interaction	Associative and positive image, employee interaction, involvement interactions with other guests	Holbrook (1994), Schmitt (1999)
Attitude	Evaluation, value, belief	Preference	Cronin, Brady & Hult (2000), Ennew & Binks (1999),
Behavior	Future intentions	Recommendation, word-of-mouth, future patronage, willingness to pay more than relative market	Fornell et al. (1996), Kristensen et al. (2000), Zeithaml et al. (1996)

To quantify and measure the experiential constructs’ impacts on customer attitudes and behaviors, three sets of hypotheses were proposed and guided the methodology of this study. H1a to H1h were developed to test the

relationship between each construct of experiential values and hotel guests' attitudes (preference) for the hotel. H2a to H2h were proposed to test the relationships between each construct of experiential values and guests' behavior intentions. H3 was planned to test the relationship between guests' attitudes and their behavioral intentions. These hypotheses were grouped into three sets: experiential values-attitude, experiential values-behavior, and attitude-behavior.

Experiential Values – Attitude and Experiential Values – Behavior

A number of research papers support the relationship between experiential values and customer attitudes (brand preference), as well as between experiential values and customer behaviors (Cronin, Brady and Hult, 2000; Ennew and Binks, 1999; Zeithaml et al., 1996). Schmitt (1999) tested that each experiential value in the dimensions of sense, feel, think facilitated positive customer satisfaction and loyalty. Customers can also attain positive values through special and unique experience. Moreover, many researchers conducted studies on different environment factors and asserted that those factors create different customers' responses. These factors include music (Areni and Kim, 1993; Hui, Dube and Chebat, 1997), color (Bellizzi, Crowley and Hasty, 1983), smell (Spangenberg, Crowley and Henderson, 1996), and level of crowding (Eroglu and Machleit, 1990). In addition, Li et al. (2002) found that through customers' emotions, color, brightness, and music volume affect customer satisfaction and time perception in retail settings.

Therefore, two sets of eight hypotheses each were developed to test the relationship between experiential values and experiential marketing in the casino hotels context. Hypotheses 1a to 1h and hypotheses 2a to 2h that relate experiential values to both customer attitudes and customer behaviors were developed to test this relationship.

Hypothesis 1 (H1a, H1b, H1c, H1d, H1e, H1f, H1g, H1h):

Experiential values - Esthetics, entertainment, escape, enjoyment, efficiency, excellence, economic value, and social recognition - are positively related to attitudes for the hotel brand.

Hypothesis 2 (H2a, H2b, H2c, H2d, H2e, H2f, H2g, H2h):

Experiential values - Esthetics, entertainment, escape, enjoyment, efficiency, excellence, economic value, and social recognition - are positively related to future behaviors.

Attitude and Behavior

Although Fishbein and Stasson (1990) believe that behavioral intentions are motivational in nature, Bagozzi (1992) argues that attitudes (brand preference) are distinct from behaviors. Bagozzi (1992) even asserts that unless attitudes are present, behavioral intentions may not be activated. For this reason, the study proposes that attitudes for the hotel guests will positively influence their behavioral intentions. This is consistent with research that has linked values to retail store attitudes and retail patronage intent (Bolton and Drew, 1991; Dick and Basu, 1994; Mathwick et al., 2001), as well as structural research that has linked attitudes to repurchase behavior (Andreassen and Lindestad, 1998)

Therefore, attitudes towards a brand, such as preference, are proposed to influence future consumer behaviors; including recommendations, word-of-mouth, patronage intentions, and willingness to pay more than the relative market price (Bagozzi, 1992).

Hypothesis 3: Attitudes towards the hotel brand are positively related to future behaviors.

METHODOLOGY AND ANALYSIS

Prior literature (Sweeney and Soutar, 2001) shows that multiple value dimensions explain consumer choice better, both emotionally and functionally, than does a single 'value for money' item and should produce superior results when investigating consumption value. Based on previous studies from various industries on experiential values, eight dimensions were retrieved measuring the multi dimensions of casino hotel experience. These dimensions measure esthetic appeal, entertainment, escape, efficiency, economic value, service excellence, social recognition/interaction and enjoyment.

A set of 40 questions regarding experiential marketing, service quality, emotional value, functional value and customer attitudes and preference was modified and translated from previous studies. Specifically, the intrinsic and extrinsic values were depicted from Holbrook (1994) on top of the modifications made from Brady and Cronin's study (2001) on service quality, from Sweeney and Soutar's (2001) on emotional value, from Mathwick and

Malhotra's (2001) on functional value, and from Gupta and Vajic's (2000) on social interaction. Items generated for the efficiency scale were based upon qualitative research conducted by the Catalog Coalition (1993). This qualitative research was combined with published scales related to extrinsic value (Babin and Darden, 1995; Batra and Ahtola, 1991). The brand attitudes and preference items were depicted from Zeithaml, et al. (1996).

The original questionnaire was examined by a panel of experts to evaluate the validity of the questions and further tested by customers. There were several items that did not have clear loadings on one dimension. A series of analyses were run to eliminate items based on their loadings and their face validity for use on casinos, as judged by the researchers. Three items were dropped of the original questionnaire. This questionnaire was finalized with 40 items on experiential values; and attitudes and behaviors. It was designed to empirically test the relevant significance of the dimensions and the causal link between the experiential subscales and consumers' preference, patron intent and willingness to contribute to the brand's reputation.

Six data collectors were recruited in the local tertiary educational tourism institute where the medium of teaching is English. All surveyors were capable of conducting the interview in any of the local three languages, namely English, Cantonese or Mandarin. A training session was organized to them before they embarked on collecting data. The surveyors stayed with the respondents during the filling out of the questionnaire in case any question needed clarification. The researchers were also trained on how to approach potential respondents, introducing themselves and providing respondents with the questions, a pen and clipboard. They were tasked with positioning themselves outside of the casino hotels, preferably at check-out time, between 10AM to 1PM and approached potential respondents. A small tea towel was offered as a token of appreciation when the questionnaire was completed.

A total of 243 personal interviews were conducted randomly across the casino hotels throughout the territory of Macao. Three questionnaires were not usable due to missing information. The final usable and valid tally is 240. The interview took on average 3 to 5 minutes each and began with an introductory statement that asked respondents to think of staying at casino hotels. Respondents were asked to indicate their levels of agreement with a five-point Likert scale, where 1 = "strongly disagree" and 5 = "strongly agree."

Descriptive analysis on respondents' demographic information was extracted from data analysis. Structural equation model using AMOS software was conducted to examine the significant relationship between the experiential value items and consumer attitudes and preference for casino hotels. A total of 40 measurements were entered into SPSS. The results of respondents' demographic information were reported in Table 2.

Table 2
The Respondents Profile

<i>Variable</i>	<i>Frequency</i>	<i>%</i>	<i>Variable</i>	<i>Frequency</i>	<i>%</i>
Gender			Port of Entry		
Male	130	54.2	Air	49	20.4
Female	110	45.8	Land	111	46.3
			Water	80	33.3
Age			Income		
Less than 20	14	5.8	Less than \$ 20,000	46	21.7
20-30	83	34.6	\$20,000 – 39,999	20	9.4
31-40	88	36.7	\$40,000 – 59,999	20	9.4
41-50	40	16.7	\$60,000 to \$79,999	19	9.0
51-60	12	5.0	\$80,000 to 99,999	29	13.7
Over 60	3	1.3	Over \$100,000	78	36.8
Education			Ethnicity		
Less than high school	48	20.0	Chinese	187	78.2
Finished high school	64	26.7	Other Asians	28	11.7
Some college	64	26.7	Americans	14	5.9
College degree	48	20.0	Europeans	8	3.3
Graduate degree	16	6.7			

The respondents were more males (54.2%) than females (45.8%). Most of them were 20-40 years of age (34.6% and 36.7%, respectively). They were predominantly Chinese (78.2%) with education levels evenly represented. The respondents' household income spread out across all income levels with more respondents (36.8%) earning over \$100,000.

Confirmatory factor analysis (CFA) was employed to fit in the model with measurement scales from previous studies. Confirmatory factor analysis was deemed appropriate in this study since the analysis tests hypotheses corresponding to prior theoretical notions which can include the number and nature of factors (Bryant and Yarnold, 1995). The study intended to confirm the experiential scales that were used in other industries and generate their applicability in the casino hotel setting. Eight latent factors were extracted and were tested against three attitudes variables, namely, preference, patronage intent and referral.

The model fit scales were: $\chi^2 = 2081.095$; $df = 694$; $\chi^2 / df = 2.999$; $NFI = .701$; and $CFI = .776$. RMSEA was 0.091, which is greater than the cutoff value of below 0.06. It should be noted that indices such as Chi-square are very size sensitive and for the first couple of rounds of model modification it is unlikely to come up with a good model fit. The focus of this study was to conduct CFA based on the item constructs of EFA from previous studies and to test the applicability of the scale in the casino hotel settings. Table 3 shows the results of the CFA model estimates on the experiential value subscale and consumers' attitude toward the casino hotels, identified by preference (best choice as well as the first choice for future patronage intent).

Table 3
Experiential Values and Their Impact on Brand Attitude

<i>Brand loyalty</i>	<i>Experiential value subscale</i>	<i>Regression weight</i>	<i>S.E.</i>	<i>C.R.</i>	<i>P.</i>	<i>Standard regression</i>
Attitude	Efficiency	2.308	1.270	1.818	.069	1.707
Attitude	Economic	.013	.033	.391	.696	.031
Attitude	Excellence	.735	.331	2.221	.026	1.784
Attitude	Escape	.294	.080	3.684	***	.713
Attitude	Social interaction/recognition	.256	.048	5.270	***	.620
Attitude	Entertainment	.413	.194	2.134	.033	1.003
Attitude	Enjoyment	.125	.055	2.277	.023	.303
Attitude	Esthetics	.514	.172	2.988	.003	.958
Behavior	Attitude	.591	.077	7.673	***	.626

*** denotes significance at .001

According to the output, all but two of the experiential values' weights were significantly related to attitude variables at either the .05 or .001 significance level. The two experiential value subscales that did not have significant influence on customers' attitudes were efficiency and economic value. Values in the two dimensions were not significantly effective in generating customers' preferable attitude for the hotel brands in the casino lodging segment. The experiential values that casino hotels should capitalize on are esthetic appeal, entertainment, sense of escape and social interaction/recognition. These values significantly impacted customers' attitudes and behaviors toward a casino hotel. As such, hypotheses set one were supported except for values in the efficiency and economic value constructs.

In the matrix of customers' loyalty behavior and the brand experiential value scale (Table 4), four out of eight values constructs were not significantly related to customers' brand behavior, as represented by a willingness to pay a higher rate and recommend and pass positive word-of-mouth. The four areas were enjoyment, economic value, service excellence and efficiency. The most effective value scales were entertainment and esthetics; having estimates at 3.630, 1.646, respectively. This finding was not consistent with the traditional views on how to generate value for customers, thus sending a wakeup call to the casino hotel businesses at Macao on what today's customers demand. They demand for satisfaction on the emotional levels. From this finding on customers' preferences in their casino experience, it is revealed that the values that customers desire are centered on emotional and experiential level – entertaining and esthetical – rather than on what is traditionally held on functional level – price and

efficiency. The most effective values to design casino hotel experience, therefore, are entertainment and esthetics. Except for enjoyment, economic value, service excellence and efficiency, the other four proposed hypotheses were supported.

Hypothesis 3 states that attitudes towards the hotel brand are positively related to future behaviors. The goodness of fit indices, i.e., chi-square, its degree of freedom (df), its probability value (P), the Tucker-Lewis Index (TLI), and the Root Mean Square of Error of Approximation (RMSEA), all returned satisfying values that supported the model fit. The model chi-square is 2.5, $df = 3$, $\chi^2 / df = 0.830$, $P = 0.477$; indicating the default model is the same as the null hypothesis. The other fitness index, AGFI = 0.996, CFI = 1.000, the Tucker-Lewis Index value at 1.003 and RMSEA values at 0.000; were all supportive of the model fit. Therefore, hypothesis 3 is supported.

Table 4
Experiential Values and Their Impact on Behavior

<i>Brand loyalty</i>	<i>Experiential value subscale</i>	<i>Regression weight</i>	<i>S.E.</i>	<i>C.R.</i>	<i>P.</i>	<i>Standard regression</i>
Behavior	Esthetics	1.571	.445	-3.533	***	1.646
Behavior	Entertainment	2.663	.514	5.180	***	3.630
Behavior	Enjoyment	.205	.141	1.455	.146	.279
Behavior	Escape	.559	.193	2.894	.004	.762
Behavior	Economic	.053	.090	0.586	.558	.072
Behavior	Excellence	1.080	.635	1.701	.089	1.473
Behavior	Social interaction /recognition	.239	.057	4.235	***	.326
Behavior	Efficiency	.055	.056	.990	.322	2.584

To sum up, the experiential values that generate esthetic appeal, entertainment, sense of escape and social interaction/recognition in casino hotels significantly impact customers' attitudes and behaviors about the casino they use, as identified by hotel preference, patronage intent and willingness to recommend to others. Contrary to the common beliefs about value propositions in lodging industry, the efficiency and economic values are not significantly related to either customers' attitudes or behaviors.

CONCLUSIONS AND LIMITATIONS

Among the experiential values tested, values for money and service seem to have lost their elixir status with today's market. The greatest significant relationship was detected between esthetic, entertainment escape and social recognition and interaction value and customer attitudes and behaviors. An examination of other subscales of experiential values showed no significant relationship detected between efficiency and economic value and customer attitudes and behaviors. These findings varied from the previous argument made by Schmitt (1999) that neither business nor consumers had the mindset yet to embrace and undergo memorable experience. Consumers obviously are embracing the experience concept. They showed the demand as well as mindset for a unique personal experience when searching for casino lodging experience.

The findings bear great implications for the casino industry on its marketing practice. The casino industry has long known to entice the market with price and the practice of "complimentary" rooms. Some casino firms have gone extra miles to cultivate service standards and improve service excellence. However, it is not sufficient to compete on "the basics". Admittedly, "the basics" are fundamental, as the term suggests. However, consumers are evolving into a stage asking for identity enhancement and self-expression with consumption experience. The emergence and increase of lifestyle consumers translate themselves to the challenges as well as the opportunities for the casino industry to develop unique brand experience that associates with the lifestyle markets. Unless responding to the trend and acting on the emerging demands, casino firms will not retain their hotel identity amongst the saturated market.

Limitations are noted from the current study. The greatest limitation lies with the insufficiency of the survey instrument. The question items are not sufficient in scope to reveal the experiential dimensions that consumers have with products and services. The instrument needs to be further studied for the validity of the

construct. In the attempt to conduct reliability test and factor analysis, the survey items generated only two subscales that explained great amount of variance. Besides, while the sampling method is rigorous, the sample size needs to be larger to better represent casino users at Macao.

Nevertheless, this study was an exploratory attempt to test the experiential value scales in casino industry. It answered the questions that if experiential values were applicable in casino hotels and, if they were, what values customers were particularly looking for. The study results showed that consumers cared for experiential values that were characterized by esthetics, entertainment, escape and social recognition/interaction. Those values facilitated consumers' positive attitudes and behaviors for casino hotels. It is thus concluded with caution that the experiential value scales are applicable to the casinos, and hotel operators need to identify the niche market and strategically incorporate those above-mentioned values with their service and product offerings. By so doing casino hotels will establish unbreakable emotive bonds with customers, maintain their distinctive hotel identity and sustain the competitive edge in the market.

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**A STUDY OF THE AGGLOMERATION OF CHINA CONVENTION INDUSTRY - AN ECONOMIC AND
NEO-ECONOMIC GEOGRAPHY FRAMEWORK APPROACH**

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ABSTRACT

Accompanying the expansion of its opening-up to the outside world, China has witnessed a steady increase in the area of international and regional communication, which has consequently led to rapid development in the convention industry. This paper aims to investigate the factors influencing the agglomeration of China's major convention-hosting cities under the framework of economic and neo-economic geography. Empirical analysis reveals that factors such as a city's political or economic importance, degree of urbanization, quality of transport infrastructure and communication are all important factors that impact on the agglomeration of China's convention industry.

Key Words: convention, China, agglomeration, economic geography, neo-economic geography

INTRODUCTION

Accompanying the prosperity and deepening integration of the world economy, China has witnessed a dynamic increase in the number of transnational and transregional economic conventions and exhibitions. In China, along with the country's elevated position on the international political and economic scale, the communication and cooperation with the rest of the world are ever increasing. As a result, more and more international mega-scale conventions are now held in China (Wang and Zhu, 2006). In addition, China's domestic economy continues to grow rapidly, leading to the flourishing of a diverse array of economic/trading conventions and exhibitions. In 2006, more than 3,000 exhibitions and conventions were held, bringing a total income of 126 billion RMB (US\$17.2 billion) to over 10 different industries including transportation, hotels, and communications, etc. (Ma, 2007).

Along with the rapid development of China convention industry, a number of urban centers for the conventions business have been established. However, it is worth noticing that the level of convention and exhibition industry development is imbalanced between different regions in China. In particular, economic centers such as Beijing, Shanghai and Guangzhou host a large number of domestic and international conventions every year, reassuring themselves as convention centers, while some other cities have been virtually left out in this development wave (Tan, 2006). With regard to research on China's tourism industry, although theoretical studies have yielded many strategic suggestions for adding impetus to China's convention industry (Ju, 2006), little academic attention has focused on the factors influencing the agglomeration in the convention industry.

This paper draws on the theory of economic and neo-economic geography in investigating the agglomeration phenomenon in convention industry. While economic geography emphasizes the significant positive effects of each region's special disparities, neo-economic geography has in the past two decades achieved great success in explaining industry agglomeration and regional disparities. The latter claims that geographic location and

historical advantages provide the initial conditions for agglomeration, which is further reinforced by increasing returns and positive feedback, thus allowing the more advanced and developed regions to maintain their superiority (Fujita, Krugman, and Venables, 1999). This paper aims to employ the theory of economic and neo-economic geography to explore: (1) Economic and neo-economic geographical factors leading the agglomeration of the convention industry in China's urban centers; (2) The contributions and functions of various factors in the development of the Chinese convention industry; and, (3) Implications and suggestion to the development of China's convention industry.

LITERATURE REVIEW

It has been generally agreed that conventions are a major contributor to regional and national economy (Crouch and Ritchie, 1998; Rutherford and Kreck, 1994). According to statistics from the International Congress and Convention Association (ICCA, 2007), Vienna, the capital of Austria, held 147 conferences in 2006, making itself top of the ten most popular locations for international conferences. The top Asian cities were Singapore and Seoul, ranking 3rd and 7th respectively.

Why are certain cities particularly attractive as the convention site? In foreign countries, association executives and meeting planners play a key role in selecting the convention site. Convention site-selection is one of the hottest issues in the domain of convention research. The review of related literature shows that the primary motivations in convention site-selection can be categorized into the following areas: (1) Transportation and accessibilities; (2) Appropriateness for conference headquarters; (3) High quality services; (4) Guarantee of financing; (5) Geography of location; (6) Established tourist market; and, (7) Security (Weber and Chon, 2002; Crouch and Ritchie, 1998; Oppermann, 1996). Many researchers studying the site-selection criteria have focused not only on identifying the perceived importance of an attribute on association meeting planners, but also on their evaluation of performance for identified convention attributes. Because of its applicability to various areas of the convention sector, the IPA (Importance-Performance Analysis) has been widely used by researchers to evaluate destination or facility performance for important attributes which affecting the decision-making on site-selection (Baloglu and Love, 2003).

It cannot be denied that factors like a pleasant environment and of the ability to provide excellent services are very important both in convention site-selection by meetings planners, and in stimulating the level of interest among potential participants (Go and Govers, 1999). Indeed, these factors have been extensively studied in the field. However, this paper intends to explore in-depth more fundamental factors that impact the nature of convention industry agglomeration. Based on the framework of Neo-economic Geography, the present study aims to examine root causes of convention industry agglomeration in China, and, by using the research methods of econometrics, to uncover the key factors guiding this agglomeration.

DATA SOURCES

Ten cities in the list of China's convention cities issued by China Conference and Exhibition Society (CCES) were selected and the panel data of the cities in recent five years (2001-2005) were collected. The data were analyzed and tested for the convention industry agglomeration factors to answer the research questions.

The ten cities are: Beijing, Shanghai, Guangzhou, Shenzhen, Hangzhou, Chengdu, Chongqing, Qingdao, Dalian and Tianjin. These ten cities include municipalities under the direct control of the Central Government, such as Beijing, Shanghai, Chongqing, Tianjin, and also provincial capitals like Hangzhou, Chengdu, and Guangzhou, as well as regional economic centers, such as Shenzhen, Qingdao and Dalian. From another perspective, both coastal cities (Shanghai, Qingdao, Dalian and Tianjin) and inland cities (Chengdu and Chongqing) are included. Due to limited availability of statistics, the panel data was used for the above cities from 2001 to 2005. Most of the statistics were derived from the *China Urban Statistics Yearbook*, *The China Tourism Yearbook*, and the *China Statistical Yearbook*, as well as the statistical yearbooks of local districts. It needs to be acknowledged that due to the short history of China's convention industry development, only 5-year data of the econometrics were available.

The economic geography influence is examined through the variable of Coastal Areas (which indicate a city is a coastal city or not) and Municipalities Directly Under the Central Government (which indicate a city is a municipality or not); Five other factors, which are Service Industry, Urbanization, Urban Transportation, Local

Consumer Demand and Access to Information, are used to examine the neo-geography influences; and the variable of foreign direct investment (FDI) to represent the political impact.

MODEL

The previous sections have reviewed the influencing factors of economic and neo-economic geography on industry congregation and agglomeration of convention center cities. This section is to introduce a model based on the characteristics of the panel data. The model is as follows:

$$Y_{it} = \alpha_0 + \alpha_1 X1_i + \alpha_2 X2_{i,t-1} + \alpha_3 X3_{i,t-1} + \varepsilon_{it}$$

In the above equation, Y_{it} stands for the annual income of each local region's convention industry, which is the variable in the measurement of agglomeration of convention industry. The explained variable is the ratio of individual city's convention industry revenue to the average of 10 cities. Standard adjustments were used to unify the data of Y_{it} . $X1$ stands for the vector of economic geography, $X2$ the vector of neo-economic geography, and $X3$ the vector of economic policies. As to factors like economic geography and economic policies that evolve with time, we allowed for a delay of one year to control the corresponding variables. Other Greek letters are constants, coefficients, and residuals.

Economic Geography Factor Variables (X1)

There are two dummy economic geography variables, Coastal Area and Municipality in this vector.

(1) Coastal Area. Since geographic and historical conditions and policy orientations after the Reform and Opening up of China have given the coastal areas advantages, the disparity between the central and western areas is not significant. Thus we expect the variables of coastal areas to have slightly positive effects on the congregation of the convention industry in the coastal areas.

(2) Municipality directly under the Central Government. The four municipalities directly under the Central Government – Beijing, Shanghai, Chongqing, and Tianjin – have economic functions that are obviously different from the other provinces. In fact, they take on more function as centers of politics, transaction and services. This kind of peculiarity of the metropolitan economy has attracted the conference industry in a certain degree, and that is why the effects of this variable are speculated to be positive.

Neo-economic Geography Factor Variables (X2)

Five variables are in the Neo-economic Geography vector: service industry, urbanization, urban transportation, GDP per capita and accessibility of information.

(1) Service industry. The convention industry needs support from other related service industries such as hotel, restaurant, local tour, transportation, and entertainment, etc. This study used the ratio of service industry GDP to national GDP to evaluate the impact of the service industry on convention industry.

(2) Urbanization. In order to study the correlation of urbanization with the agglomeration in urban centers of convention industry, this study adopted a comparison of the non-agricultural population's percentage of total population with that of the national average to exemplify the city's development and the degree of urbanization. Thus, the annual figures of each of the ten cities could be compared with that of the national average to gauge the relative degree of urbanization for each city.

(3) Urban transportation. Urban transportation was used as one variable to measure the correlation of urban transportation with agglomeration in urban centers. The index of road area per capita was used to measure the standard of transportation in each of the ten cities.

(4) GDP per capita. The study compared the national average GDP per capita with that of each of the ten cities to estimate the relative annual purchasing power of the city's consumers, thus the level of the area's economic development and scale of its markets could be revealed.

(5) Accessibility to information. The relative level of accessibility to the information in each area was measured by comparing the number of internet users in each city with the national average. A successful convention

depends on well-conditioned information facility, for example, Internet, mobile phone, etc. On the other hand, convenient channel of communication will publish the convention information more efficiently, which will improve the influence of the events.

Economic Policy Factor Variable (X3)

FDI. The foreign direct investment (FDI) was used to measure the economic policy in each city. Increased foreign direct investment leads to increased business interaction and communication, hence driving the demand for convention. FDI was adopted as the economic policy to assess the degree of each city's opening up to the outside world.

RESULTS

Table 1 reports the result of econometric analysis. Model 1 and Model 2 are Fixed Effect (FE) Model and Random Effect (RE) Model respectively, covering all the variables above. The result of Hausman test shows the hypothesis of no systematic difference between FE (Model 1) and RE (Model 2). Therefore, Model 2, which indicates that RE is used for observation.

Results reported in Table 1 and related testing show that the result of Model 2 is stable and the discovery of positive research can be discussed. In general, the economic geographical factor, economic policy and neo-economic geographical factor have influenced on convention industry agglomeration. The development and agglomeration of conference industry is a complicated process influenced by multi-factors which cannot be neglected. The effects of each factor are summarized in details as follows.

Table 1
Estimate of Influential Factors for Conference Concentrated City

Variables	Model 1 Fixed Effect			Model 2 Random Effect		
	Coefficient	Stand Error	Sig.	Coefficient	Stand Error	Sig.
Municipality	dropped			0.096	0.048	P<0.05
Coastal Area	dropped			0.064	0.065	
Service Industry	0.434	0.34		0.958	0.162	P<0.10
Urbanization	-0.665	0.052	P<0.10	-0.422	0.175	P<0.05
Urban transportation	0.12	0.053	P<0.05	0.123	0.041	P<0.10
Per GDP	-0.01	0.054		0.017	0.052	
Information Accessibility	0.027	0.018	P<0.01	0.013	0.015	
Foreign Direct Investment	0.022	0.284		0.007	0.032	
Constance	0.179	0.359		-0.635	0.143	P<0.10
R ² within the group	0.282			0.192		
R ² among groups	0.035			0.915		
Hausman test (FE and RE)				10.12		

Effect of municipality directly under the Central Government: In Model 2, RE shows significant positive result when $P \leq 0.05$. Municipality directly under the Central Government is accorded with the economic and geographical advantages. The special positions in Chinese political and economic system sharpen their edges in convention industry.

Effect of coastal cities: In Model 2, RE shows insignificant correlation between coastal cities and convention industry. This result is largely due to the geographic distribution of tourism resources. A lot of important tourism cities in China are not located along the coast, but in view that tourism resources are one of the vital factors to attract conventions, the advantages of coastal cities in economic development and opening up are reduced.

Effect of service industry: In Model 2, there is significant positive correlation between service industry and convention industry when $P \leq 0.10$. The analysis seems to suggest that the larger weight of service industry in one

individual city, the more mature its work division is in this industry. This point is interpreted as a good foundation for the development and agglomeration of convention industry.

Effect of urban transportation: RE (Model 2) shows significant positive results when $P \leq 0.10$. The acreage of road per capita reveals the capability of city's infrastructure and transportation, which obviously have a positive effect for the agglomeration.

Effect of information Accessibility: FE (Model 1) shows very significant positive result when $P \leq 0.01$, which indicates that the higher rate of Internet user in population, the higher ability of information diffusion and the higher coverage of facilities a city have. But RE is not significant.

Effect of FDI: FDI is an important index to measure the level of opening up of a city, which demonstrates the attitude of political and economic field as well as the infrastructure preparation for opening up. A city more developed in hardware and software of opening up is more appealing to high level international conferences which may promote the agglomeration of the industry. In Table 1, both FE and RE shows no significant between the variable of FDI and convention industry, which indicates that this factor is not so important to the convention industry as the other factors which show significant correlations.

Effect of urbanization and GDP per capita: The correlation between urbanization, GDP per capita and convention industry are significant negative and insignificant respectively. The researcher assumes that firstly, the limitation in sampling might cause the deviation with the results. There are only 10 cities' data within 5 years. This might affect the econometric analysis to a certain extent. Secondly, this may be caused by the tourism resources factors. In China, many places that boast abundant tourist resources feature lower degrees of urbanization. However, previous literature reviews have shown that tourist resources will often affect the decision-making of site-selection for conventions. In that sense, the correlation between urbanization and convention industry need further examination from the perspective of tourist attractions.

CONCLUSION AND IMPLICATION

From the econometric test of economic geographic and neo-economic geographic factors, the following conclusion can be drawn: (1) Chinese conventional concentrated cities are formulated due to a lot of factors; both economic and non-economic geographic factors are very important to the convention industry agglomeration. (2) level of the city, urbanization, transportation and information radiation are all important factors for the convention industry agglomeration in China. In Table 1, the significant positive correlation between presence of the convention industry and the importance of the city as a political or economic center reveals that the more political or economic resources a city possesses, the greater its need for multilateral cooperation. Conventions can provide a platform for communication and cooperation between participants from the political, academic and business field, and also a platform to exchange the most updated industrial information. Hence, many conventions are held in the political or economic center of a country. The literature review shows that much research investigates the decision-making in convention site-selection from the meeting planner's point of view, but the fundamental motivation of the urban situation is usually ignored. The significant positive correlation between presence of the convention industry and the factors of urbanization, transportation, and information diffusion shows that the degree of modernization and fundamental structure in a city are very important to the development of the convention industry. (3) The level of opening up is also one of factors for the convention industry agglomeration in China. Active economic interactions initiate the request for convention and exhibition services, and therefore improve the industry agglomeration.

Through the empirical study of these ten cities, this research investigated why some cities are more attractiveness to the convention industry than others. Different from other peer research, this one is not limited by IPA analysis that includes venue, environment, facilities, tourism resources, security and other elements. This research sorts out influential factors of convention industry agglomeration via empirical analysis with city panel data. In this sense, this research is a good exploration to the study of decision-making on convention site-selection.

More importantly, this research reveals that development of the convention industry needs to keep pace with the economic and social development of a city. It is far from enough for a city to possess only a high standard of convention venues. Presently, many Chinese cities have made the convention industry as one of the most

important industries in urban planning, while few of them have undertaken careful research on whether they possess the quality to develop the industry. In fact, in terms of floor space the convention and exhibition venues in China rank second in the world, but the vacancy rate reaches 80% (Kuang, 2004). Although some cities have achieved success, the positive effects of conventions are limited because many cities are hindered by inadequacies in terms of social, economic, cultural, transportation and human resources factors. Hence, careful investigation needs to be conducted on the urban convention industry, to inform and guide future development processes, in order to avoid further wasting of resources.

The present study is not immune to limitations. For one thing, although the richness of tourism resources is one of the important factors, as mentioned in the second section, this point is difficult to be integrated into the framework of this study. For another, the statistics of tourism is not complete and updated enough and we have detected some differences in measuring methods in different regions. This weakness has made econometric analysis difficult and may have affected the accuracy of the results to a certain extent. However, while acknowledging these limitations, the research method is innovative and the results may be of great value to the development of Chinese conventional industry.

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ETHICAL JUDGMENT OF HOSPITALITY AND BUSINESS STUDENTS IN THE ACADEMIC ENVIRONMENT

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ABSTRACT

Plagiarism, cheating, illegal downloading of copyrighted material and acts of selfishness, all prescribing questionable ethical judgments, have infiltrated the life of today's college students, thus capturing the attention of academic scholars. The purpose of this research was to investigate the ethical judgment of hospitality and business students in the tertiary academic environment. The authors developed and administered a quantitative questionnaire to a sample of 500 individuals currently pursuing accredited hospitality and business degrees at three tertiary institutions in Cyprus. A number of differences were revealed between the academic major, gender, ethnic background, prior exposure to a formal ethics course, religious beliefs, year of study and academic performance.

Key Words: ethics, academia, hospitality and business students, Cyprus

INTRODUCTION AND RATIONALE

Ethics, which derives from the Greek word 'ethos' meaning 'character' or 'custom', has captured the attention of numerous scholars who have investigated the topic from a number of difference perspectives, including ethics in the academic environment. Plagiarism, cheating, illegal downloading of copyrighted material, such as e-books and software programs, and acts of selfishness, all prescribing questionable ethical judgments, have infiltrated the academic experience of today's college students. Our goal was to investigate, for the first time, the ethical judgment of hospitality and business students' within the Cyprus academic environment.

LITERATURE REVIEW

Following is a review of related studies, which have investigated students' ethical behavior as it relates to factors such as gender, age, religion, academic discipline and culture. Prior to that, a brief description is provided of the most common types of students' unethical behaviors within the academic environment.

Types of Unethical Behavior by Students: Cheating and academic dishonesty is considered by researchers as a very serious unethical behavior. As Chapman et al. (2004:237) have put it "academic dishonesty focuses primarily on the following issues: how to measure cheating and the real magnitude of this problem among college students, what individual differences and situational variables are related to cheating, and the importance of these variables in understanding cheating behavior, whether cheating in college presages dishonest behavior in the workplace, and what can be done on either a tactical or strategic level by faculty and institutions to minimize cheating behavior". West et al. (2004:176) have argued that cheating is a "violation of several norms, but primary among them is justice" where a student has an advantage over his fellow students and this behavior is driven primarily by morality and achievement motivation (Newstead et al. 1996). Davis et al. (1992) concluded that academic dishonesty is a major problem and despite the fact that students know that cheating is wrong, most admit to having done it at some time during their schooling or while at tertiary education level (Sisson and Todd-Mancillas, 1984). What motivates students to cheat can vary depending on peer behavior (McCabe and Trevino, 1993), the perceived need to receive high grades, the lack of appropriate study and the perception of poor instructional quality, and social acceptance (Anonymous, 2004). However, the fact of the matter is that cheating is increasing due to new technologies, which provide an opportunity for dishonest behavior (McMurtry, 2001).

Variables Investigated-Gender: Freeman and Bartholomew (1991) found that male hospitality management students had significantly lower personal business ethics score and social responsibility score than their female

counterparts. Wood and Glass (1995) reported that female students were less likely to allow a fellow male student to make an illegal copy of computer software. Harris and Weaver (1994) have found that females were also more ethical than males as far as computer use is concerned. In Yeung et al.'s (2002) study, female students were found to have a higher level of tolerance towards "violation of school rules" and lower level of tolerance towards "selfishness" and "unfair advantage" than their male counterparts. Luthar et al. (1997) reported that female undergraduates were more likely to have ethical attitudes about cheating than male undergraduates. Ameen et al. (1996) discovered that male college students were more likely than female students to report having engaged in unethical academic behavior. A meta-analysis by Borkowski and Ugras (1998) of 47 empirical studies of business students and ethics from 1985-1994 inclusive examine the importance of gender. It was reported that 16 studies found no significant differences between the genders, two with mixed results did not specify the relationship, and 29 studies found that female students exhibited more ethical attitudes/behavior than their male counterparts.

Age: Some developmental psychologists (see, for example, Kohlberg, 1976) have argued that one's moral development increases with age until one reaches adolescence. The meta-analysis of 35 studies by Borkowski and Ugras (1998) reported that 19 found no relationship between age and ethical attitudes of business students, one mixed study did not report findings, 13 found that older students responded more ethically and two studies found the opposite. They concluded that attitudes seem to become more ethical with age, supporting Kohlberg's (1984) theory. Others, however, disagree with Kohlberg and maintained that moral development continues into young adulthood. Rest (1988) concluded that dramatic and extensive changes occur in young adulthood (20s and 30s) in the basic problem-solving strategies when dealing with ethical issues.

Religion: There are conflicting findings on the relationship between one's religion and attitudes to ethics. On the one hand Driks (1998) reported significant differences between those who have religious beliefs and those who do not while, on the other, Yeung et al. (2002) and Siegfried (2004) found no such differences.

Academic Discipline: Students' major academic discipline has also been reported as relevant variable in researching their ethics. A number of studies (Arlow, 1991; Milner et al. 1999) have employed various definitions of "ethical behavior" and reported that business students generally emerge as 'less ethical' than their non-business counterparts. Yeung et al. (2002:191) defined students' "ethical standard" as "internal personal integrity" and reported that hospitality and tourism students at three institutions in Hong Kong had a comparatively "higher level of ethical standard". They attributed their finding to the influence of parents, high school and the Chinese philosophy of "Confucius" which stresses "unselfishness" and "integrity". In an attempt to account for the differences found between business and non-business students, Wood et al. (1988:256) claimed that business students are selfish utilitarians who can not reason beyond Kohlberg's "law and order" stage; in other words; their behavior is not governed by "fundamental moral principles". As to the reason why, Pichler (1983) blamed the type of education business students receive and argued that business should rely on the arts and sciences to develop creative integrative dispositions of the mind.

Culture: Hofstede (1991:112) defined "culture" as a "set of likely reactions of citizens with a common mental programming....reactions need not be found within the same persons, but only statistically more often in the same society" since culture represents a system of shared values and beliefs. Thus, it would be reasonable to argue that culture may well affect ethical reasoning (Husted et al. 1996). A comparative study by Lysonski and Gaidis (1991) of university business students, in the US, Denmark and New Zealand, used 10 hypothetical situations and found no significant differences. However, Okleshen and Hoyt (1996) surveyed undergraduate business students in the United States and New Zealand on 15 hypothetical business situations and found New Zealand students to have a higher propensity to act ethically. Bernardi et al. (2004) found that ethically questionable behavior is more likely to occur in the US than in Japan. Haswell et al. (1999) reported a study of accounting students in Australia, South Africa and the United Kingdom who self-reported on their propensity to engage in cheating behavior when presented with specific rewards, risks and penalties.

RESEARCH METHODOLOGY

The primary purpose of the present study was to investigate tertiary hospitality and business students' ethical judgments in the Cyprus academic environment in the light of empirical findings reported in the literature. The following research questions, reflecting the study's primary purpose and objectives were formulated:

RQ1: Which are the most important ethical academic issues for Hospitality and Business students?

RQ2: Are there any significant differences between the student's ethical judgments and variables such as their academic major, gender, ethnic background, prior exposure to a formal ethics course, religious beliefs, year of study and academic performance (measured by the GPA)?

Firstly, the authors conducted a comprehensive literature review and established that there had been no prior research investigating this topic in Cyprus. Reflecting both the issues revealed by the literature review and the authors' subjective experience working at an academic environment, a quantitative questionnaire was developed. The questionnaire was separated into four sections, one of which measured college students' ethical judgments in an academic environment. The research population included students pursuing accredited hospitality and business related degrees in tertiary institutions of the country. According to recent figures published by the Cyprus Ministry of Education and Culture (2006), close to 10,000 individuals, both Cypriot and international, are studying in tertiary institutions out of which 3,500 pursue accredited hospitality and business-related degrees. The authors were able to ensure the cooperation of three out of the four institutions offering such accredited programs, two private and one public. In total, the sample population was reduced by the 400 students of the fourth institution that declined to participate, thus reducing the overall population to 3,100 students, which represents 89% of the total population. A random sampling technique was utilized to select 500 cases which in relation to the sample population of this study ensure a confidence interval of 4%, at 95% confidence level. Participation in the survey was voluntary and participants were assured of confidentiality. Prior to administration, the questionnaires were pilot-tested for reliability with the utilization of the test re-test method and for validity with a panel of three experts. Descriptive and inferential statistics, namely reliability analysis (*Cronbach's Alpha*), exploratory factor analysis, independent sample t-test, paired sample t-test, and one-way ANOVA with Post Hoc Multiple Comparison Test (*Tukey HSD*), were utilized to analyze the collected data, test their reliability and answer the formulated research questions. Finally, the authors would like to acknowledge the limitation of the conducted research activity as it relates to the issue of "social desirability" where subjects may respond to what they think is socially desirable.

RESEARCH FINDINGS

The questionnaires were group-administered to a total of 500 individuals during class time. Four hundred and fifteen (415) questionnaires were completed and returned to the researchers. Of those, six were incomplete, and thus excluded from the study, reducing the number of usable surveys to four hundred and nine (409), i.e., 81.8%.¹² The study participants were evenly distributed according to gender (Males = 50.6%; Females = 49.4%) and were mostly Cypriots (58.1%). Eighty-five (20.8%) were first year students, seventy (17.1%) second year, seventy-two (17.6%) third year, ninety-four (23%) fourth year, and eighty-eight (21.5%) were pursuing graduate degrees. Of all participants, two hundred and ninety-six (72.4%) were pursuing a business related degree, which includes the disciplines of Marketing, Accounting, Finance, Economics, and Management, and one hundred and thirteen (27.6%) a hospitality related degree which includes both Hotel and Tourism Management majors. In an attempt to reduce the large number of variables to a smaller number of factors, the authors conducted an exploratory factor analysis with the use of SPSS's Principal Component Analysis with Varimax rotation (*Kaiser Normalization*). Exploratory factor analysis is primarily used to reveal the factor structure of the data. The appropriateness of our factor model was indicated by both a Kaiser-Meyer-Olkin (*KMO*) statistic value of 0.902, which confirmed its high sampling adequacy, and the significance ($\chi^2 = 2447,391$; $p < .000$) of the Barlett's test of sphericity. Principal components with Varimax rotation factor analysis revealed four factors with an eigenvalue of greater than 1.0. This four factor solution explained satisfactory 54.83% of the total variance. All variables included in the factor analysis were tested for reliability with the utilization of Cronbach's Alpha; a reliability model of internal consistency based on average inter-item correlation. The overall reliability of the 18 items integrated in the factor analysis, is .879, whereas the reliability of the four retained factors ranges from .662 - .745; all within the parameters of the widely acceptable level of reliability (.700). Table 1 exhibits the results of the factor and descriptive analysis, as well as the reliability alpha (Cronbach) scores of our data. The four retained factors were named by the authors as violation of school regulations, selfishness, cheating, and computer ethics.

¹² Although the questionnaires were group administered to students within their classrooms, 85 questionnaires were returned empty, thus not measured in the incomplete category.

Table 1
Factor (Varimax Rotation with Kaiser Normalization) and Descriptive Analysis (n=409)

<i>Factor Analysis</i>						<i>Descriptive Analysis</i>			
Factor Items	Loading	Eigenvalues	Percentage of Explained Variance	Reliability Alpha (Cronbach)	Mean	Std Dev.	Overall Rank	Comments	
Factor 1: Violation of School Regulations (6 items)		6.667	33.335	.745	2.17	.797	3		
Use another student's computer account without his/her permission:	.796				1.62	.973			
Sell a paper (individual project, research paper, thesis, etc.) to another student:	.378				2.22	1.319			
Lying to the course instructor for missing a class:	.388				2.51	1.209			
Give your student ID to outsiders to gain access to university/college facilities:	.550				2.33	1.311			
Find a research paper on the internet and submit it as your own:	.505				1.96	1.123			
Submit the same paper (with cosmetic changes) to more than one class:	.409				2.37	1.254			
Factor 2: Computer Ethics (3 items)		1.786	8.928	.662	2.89	1.028	1	Highest Tolerance	
Download illegal copyrighted files (music, movies, software, etc.) from the internet:	.707				3.22	1.362			
Copy university/college owned commercial software for private use at home:	.569				2.57	1.295			
Duplicate a copyrighted e-book without permission:	.790				2.89	1.326			
Factor 3: Selfishness (5 items)		1.469	7.345	.722	2.12	.821	4	Lowest Tolerance	
Hurt others to achieve professional advancement (better academic results):	.328				1.81	1.197			
Gain unauthorized access, review and modify students' (yours or others) confidential records:	.420				1.94	1.081			
Develop better relations with course instructors in order to obtain preferential treatment:	.743				2.60	1.228			
Do not put full effort in group projects:	.477				2.22	1.296			
Use a bribe in order to secure preferential treatment crucial to your professional development during your studies:	.466				2.03	1.135			
Factor 4: Academic Cheating (4 items)		1.045	5.223	.736	2.37	.919	2		
Use unauthorized help to cheat at an exam:	.315				1.97	1.122			
Sit next to the best student in class and attempt to copy the exam's answers without his/her permission:	.412				2.11	1.183			
Allow another student to look at your paper during an exam:	.809				2.70	1.261			
Cheat in a very difficult final exam if the chance of getting caught was less than 10%:	.780				2.69	1.319			
Total Scale Reliability Alpha (18 Items)				.879					
Total Percentage of Explained Variance			54.831						

Note: Kaiser-Mayer-Olkin measure of sampling adequacy = **0.902**. Extraction Method: Principal Component Analysis. The questions "It is ok for two or more students to share their work for a computer individual assignment and each hand in a copy" and "In the library, hide useful books to prevent others from obtaining" were excluded because of low factor loading (less than .300). All absolute Values of less than .300 were suppressed.

Scale: 1-Strongly believe that the statement is wrong; 3-No Opinion/Neutral; 5-Strongly believe that the statement is not wrong

Findings revealed that participating business and hospitality students have the highest level of tolerance, suggesting a relative flexibility in their ethical judgments, towards computer ethics (*mean 2.89*) and the lowest towards selfishness (*mean 2.12*). Students seem to have the greatest tolerance for actions such as software piracy, duplication of copyrighted e-books and the unauthorized downloading of copyrighted files from the internet, statement that score the highest mean (*mean 3.22*). In contrast, student respondents seem to exhibit the least tolerance to issues relevant to one's selfishness. Issues such as bribes, hurting others to secure personal advancement, the development of better relationships with instructors to achieve preferential treatment (a.k.a. favoritism), and the individuals' decision not to put full effort in group projects (a.k.a. free riding) are perceived as unacceptable by the majority of the respondents.

Academic cheating, which mostly involves students' efforts to gain an unfair advantage during tests and coursework assignments, was ranked second (*mean 2.37*) followed by violation of school regulations. It is very important to note that students exhibit low tolerance to the idea of using unauthorized help to cheat at an exam (*mean 1.97*), nevertheless, their tolerance becomes much higher when the chance of getting caught in such an act is less than 10% (*mean 2.69*)¹³. It is obvious that the probability of getting caught, thus facing the consequences, influences the students' ethical judgment with regards to cheating. Finally, violation of school regulations refers to unacceptable actions, specified by the institution, such as unauthorized use of academic resources and misconduct with faculty. With an overall mean of 2.17, respondents exhibit their low-to-moderate level of tolerance towards such actions. The authors also investigated whether significant statistical differences exist between the respondents according to their academic major, gender, ethnic origin, prior exposure to academic ethics courses and religious beliefs. As shown in Table 2, independent sample t-test revealed that a number of differences exist between the respondents.

Table 2
Differences according to Academic Major, Gender and Religious Beliefs (*Independent Sample t-test*)

Ethical Factor	Group	N	Mean	Std. Deviation	t	Sig. (2-tailed)
Computer Ethics	Business Students	296	2.98	.998	-2.839	.005*
	Hospitality Students	113	2.66	1.071		
Academic Cheating	Business Students	296	2.41	.928	-1.195	.233
	Hospitality Students	113	2.28	.892		
Violation	Business Students	296	2.22	.783	-2.064	.040*
	Hospitality Students	113	2.03	.823		
Selfishness	Business Students	296	2.12	.831	-.095	.925
	Hospitality Students	113	2.11	.796		
Computer Ethics	Male	207	3.00	1.082	2.088	.037*
	Female	202	2.78	.959		
Academic Cheating	Male	207	2.32	.950	-1.114	.266
	Female	202	2.42	.884		
Violation	Male	207	2.17	.860	.203	.840
	Female	202	2.16	.729		
Selfishness	Male	207	2.18	.798	1.500	.134
	Female	202	2.06	.841		
Computer Ethics	Strong Religious Beliefs	210	2.76	1.034	-2.831	.005*
	Moderate / No Religious Beliefs	193	3.05	.993		
Academic Cheating	Strong Religious Beliefs	210	2.37	.918	-.210	.834
	Moderate / No Religious Beliefs	193	2.38	.917		
Violation	Strong Religious Beliefs	210	2.13	.825	-1.089	.277
	Moderate / No Religious Beliefs	193	2.22	.767		
Selfishness	Strong Religious Beliefs	210	2.15	.857	.650	.516
	Moderate / No Religious Beliefs	193	2.10	.781		

Note¹: Equal Variances Assumed

Note²: No statistical differences were revealed in regards to ethnic origin and whether participants have taken a formal ethics course in the past

Scale: 1-Strongly believe that the statement is wrong; 3-No Opinion/Neutral; 5-Strongly believe that the statement is not wrong

One of our primary objectives was to identify whether significant differences exist between hospitality students and those who pursue other business related degrees. Independent sample t-test revealed differences in two of the four retained factors. In particular, hospitality students seem to be less tolerant towards eventualities

¹³ Paired Sample t-test ($t=10.806$; $p=.000$)

concerning computer ethics and violation of school regulations. In regards to gender, findings suggest that women tend to exhibit lower tolerance to ethical judgments relevant to computer ethical issues compared to men. Finally, students with expressed strong religious beliefs are less tolerant on computer ethic issues compared to those with moderate or no religious beliefs.

It is important to note that no significant differences were revealed between the four retained factors and variables such as the ethnic background and the prior exposure to a formal ethics course. Findings suggest that international and Cypriot student respondents share similar views as to the four retained factors. In regards to prior exposure to a formal ethics course, the authors wanted to examine the effect of such an experience on students' ethical judgments within their academic environment. Findings revealed no differences between students who had and those who had not taken an ethics course in any of the four retained factors. This finding, which requires further empirical investigation, may suggest that academics should re-examine the nature, structure, purpose and delivery techniques of formal ethics courses.

One-way ANOVA test was used to identify statistical differences between respondents and their year of study. As shown in Table 3, differences exist in three of the four ethical factors: computer ethics, academic cheating and violation of school regulations. Once the existing differences among the means of the five groups were revealed, Post-Hoc Multiple Comparison tests (*Tukey HSD*) were utilized to determine which means differ.

Table 3
Difference according to Students' Year of Study: One-way ANOVA and Post Hoc Multiple Comparison Tests (*Tukey HSD*)

Source	D. F.	Sum of squares	Mean of squares	F Ratio	F Probab. (Sig.)	Mean	Post Hoc Analysis (Tukey HSD)
VAR: Computer Ethics							F S T FO G
Between Groups	4	29.488	7.372	7.421	.000	F: 2.64	*
Within Groups	404	401.356	.993			S: 2.58	*
Total	408	430.844				T: 2.94	
						FO: 2.91	*
						G: 3.33	* * *
VAR: Academic Cheating							
Between Groups	4	9.317	2.329	2.809	.025	F: 2.17	*
Within Groups	404	335.002	.829			S: 2.25	
Total	408	344.319				T: 2.35	
						FO: 2.58	*
						G: 2.46	
VAR: Violation of School Regulations							
Between Groups	4	3.787	.947	1.496	.203	F: 2.05	
Within Groups	404	255.658	.633			S: 2.04	
Total	408	259.473				T: 2.18	
						FO: 2.25	
						G: 2.28	
VAR: Selfishness							
Between Groups	4	6.583	1.646	2.479	.044	F: 2.15	
Within Groups	404	268.161	.664			S: 2.12	
Total	408	274.744				T: 2.19	
						FO: 2.25	*
						G: 1.89	*

Note: F = First Year Students (N=85); S = Second Year Students (N=70); T = Third Year Students (N=72); FO = Fourth Year Students (N=94); G = Graduate Students (N=88).

* Indicates a significant difference between first, second, third, fourth year and graduate students. Post Hoc Analysis (*Tukey HSD*): Significance Level ($p < 0.05$)

Findings suggest that first-year students are less tolerant of issues relevant to computer ethics compared to later year students. In regards to academic cheating, again first year students seem to be the least tolerant than later

year students, with a significant difference between them and fourth year students. In terms of violations of school regulations, no differences exist between the respondents. It is important to note that on the factor of computer ethics graduate students exhibit the most tolerance while on the selfishness factor they exhibit the least tolerance. Apparently, as one progress through its formal tertiary education experience, becomes less tolerant only with selfishness eventualities.

Finally, the authors investigated whether students' academic achievement, measured by the Grade Point Average (GPA) or Cumulative Point Average (CPA), has an impact on their ethical judgments within the academic environment. Findings revealed that students with high Grade Point Average (*between 3.01-4.00 out of 4.00*) are less tolerant on ethical issues relating to selfishness ($f=11.876$; $p=.000$). It seems that the good students are more sensitive to selfishness issues compared to those with average or below academic performances.

RESEARCH IMPLICATIONS AND RECOMMENDATIONS

Our findings are aligned with similar studies (e.g., Siegfried, 2004) in regards to the students' ethical judgment towards computer or internet ethics. It seems that students, most of whom are technology savvy and with moderate budgets, consider such actions acceptable, convenient, financially advantageous, and foremost risk-free. Another finding which is aligned with other researchers (Yeung et al. 2002) is that women are less tolerant on issues of computer ethics but, unlike Yeung et al., we found no such relationship with violation of school rules and selfishness.

Reflecting on the research findings, we recommend that a number of practical real-world measures be adopted, mainly by educational institutions of the country that may wish to redefine their policies and procedures regarding ethics within their academic environment. Although our suggestions reflect primarily the specific academic environment of the three tertiary institutions of Cyprus, some might be applicable to other similar environments. Firstly, tertiary institutions should make ethics courses compulsory. Where such courses are already offered the content should be reconsidered. Currently, the majority of local educational institutions offer purely philosophical ethic courses, which primarily concentrate on the study of morality, egoism, and philosophical theories. Our research suggests that such courses have limited effect on the individual's ethical judgment. Crane (2004:150) argues that "not only should there be a stand-alone business ethics course, but business ethics also should be integrated into finance, accounting, management, marketing, and other courses" and as the present authors believe hospitality students should be attending an ethics course offered especially for them. Many scholars addressed the issue as to who should teach such business ethics courses (Klein, 1998; Peppas and Diskin, 2001). Although no consensus has been reached amongst the scholars, it is our conviction that business faculty should be actively involved in the preparation and delivery of such courses due to their knowledge of current industry practices, challenges and ethical dilemmas.

Secondly, educational institutions should develop and implement a students' honor code, clarifying ethical behaviors and attitudes within the academic environment. Such guidelines should emphasize values such as academic integrity, honesty, trust, and fairness; all of which are essential to the individual's personal and professional development. Thirdly, educational institutions should revisit their guidelines on plagiarism, and other violations of school rules. Unfortunately, in an effort to present a humane face to their students, many local administrators are overly lenient in such incidents. Local students, especially those pursuing degrees in privately owned institutions, shape the perception that many acts of academic dishonesty are risk-free with minimum or no consequences. Therefore, it is vital for educational institutions to clarify and reiterate the negative consequences of such actions in addition to enhancing the probability of their discovery. It is imperative to hold our students accountable for their actions; otherwise the quality of the learning experience we provide is severely compromised. In conclusion, it is very important to understand that one of the primary goals of any educational institution is to develop individuals' both personally and professionally. Nurturing character and reinforcing positive values where both the ends and the means are justified must take the center stage in all of our efforts.

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