

# Monumental Education

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## Preface

This *Proceedings* features 66 refereed papers from a pool of 108 papers submitted for the 2006 Annual International CHRIE Conference held in Arlington, VA, USA, July 26-July 30, 2006. This year, a total of 180 papers were submitted for review (108 stand-up papers and 72 poster papers). More than 140 reviewers completed approximately 400 reviews in five weeks. Every paper, at minimum, was double-blind reviewed.

I am honored to be the Editor of this *Proceedings* and the Chairman of the Refereed Paper Review Committee for this year's I-CHRIE Conference. I would like to take this opportunity to express my heartfelt thanks to all the Associate Editors of the *Proceedings*. They have worked tirelessly to make the *Proceedings* academically excellent. Without their support, the *Proceedings* would not be possible. I would also like to thank the more than 140 reviewers for their time in reviewing these papers. Without their effort, support, and careful critique of the researchers' work, we would not be able to advance this discipline through research.

Last, but not least, my thanks to all the authors who worked so hard on your research and have come so far to be together and to share your research findings with each other.

Congratulations!



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## Safe Handling of Home-Delivered Meals for Older Americans: The Effect of Packaging

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### Abstract

A six state study was conducted of home-delivered meal programs for older Americans to determine typical handling practices and to test the effect of packaging using laboratory simulation. Temperatures of the best and worst performing delivery containers differed more than 50°F after two hours. Fastest temperature loss was observed in the bottom trays (top trays were second fastest). Foamed insulation in transport containers performed better than padded insulation and zippers were better than Velcro. Similarly, foamed trays performed better than foil. Home delivery of food requires careful packaging selection to best maintain food temperatures.

Key Words: food safety, packaging, older Americans

### Introduction

Although older Americans are generally healthy, special needs for a portion of older Americans have greatly increased, fueled in part by the increase in the fastest growing "oldest-old" age group, those 85 years and older (Administration on Aging, 2000). This group is expected to have a major impact on the nation's health care and social services. Similarly, demand for food programs such as the home-delivered and congregate meal programs has dramatically increased (Thorpe, 2003; Fey-Yensan, English, Ash, Wallace, and Museler, 2001).

The Administration on Aging's Elderly Nutrition Program (ENP) provides for congregate and home-delivered meals. Services are targeted to older people with economic or social need, but other disabled individuals may also participate under certain program conditions. It has been shown to be cost effective because of its potential to reduce the frequency of hospitalizations and improve nutritional status for many people (Kraak, 1995). At the same time concern for foodborne illness has increased, particularly for at-risk populations, which account for 10-20% of the population (Doores, 1999). At-risk populations include older Americans and those with chronic disease or physical limitations that may impair their health status. Kraak (1995) has suggested that temperatures of home-delivered meals may be a serious concern for foodborne illness with immunocompromised individuals.

An important contributing factor in foodborne illness is improper temperature control. Because of this, the FDA Food Code (FDA, 2005) has numerous guidelines for temperature handling in foodservices. However, temperature and packaging guidelines related to take-out and home-delivered foods, once they leave the foodservice are not as clearly specified. Unfortunately, poor temperature control of take-out food is thought to be a contributing factor in foodborne illness (Prior and Solnick, 2000). Home-delivered meal consumers are likely to be at-risk for foodborne illness because meals must be transported for a significant length of time, often by volunteer drivers with limited facilities for maintaining food temperature. Once the food arrives in the consumer's home, it may/may not be consumed immediately and may be held at inappropriate temperatures (on a countertop, for example) with/without reheating.

Packaging is an essential component for protection against foodborne illness from take-out foods. Packaging contains and protects food and is the primary protector against dirt and microbial contamination. Graphics on packaging can provide instructions or warnings against misuse of the product. Finally, packaging may provide convenience. For example, a convenience package allows reheating and serving from the same container. Typical packaging materials for home meal delivery include thermoset reusable trays, clamshells made of rigid polystyrene or polystyrene foam, polymer or wax coated paperboard cartons or kraft paper bags, and aluminum trays. (Brody and Marsh, 1998; Morris, 1999). Little data exist that indicate which is the most common in the home-delivered meal programs for older Americans.

Temperature abuse is another major problem. According to Bertagnoli (1996), even the best packaging won't keep food hot if it has to sit in a car for an hour before it's delivered. Insulated containers may help, but it is not known



how much heat they can retain and how long they prevent food from being temperature abused. The New York State Department of Health Sanitation Codes recommend holding potentially hazardous foods no longer than 2 hours between 45°F (7°C) and 140°F (60°C) (Kraak, 1995). The current FDA Code (FDA, 2005) recommends that food be kept outside of the temperature range from 41°F to 135°F (6 to 57°C). If food is being cooled after cooking, it should be moved quickly through the higher temperatures. The FDA recommends that it be cooled from 135 to 70°F (57 to 21°C) within 2 hours and then from 70 to 41°F or less (21 to 6°C) within 4 hours. Time may be used as a hazard control if food is marked so that it may be discarded if held for longer than 4 hours, but this practice is generally not recommended by the FDA for at-risk populations.

Relatively little is known about the safety of home-delivered meals, although the nutritional status has been the focus of several studies (Kraak, 1995; Stevens, Grivetti, McDonald, 1992; and Asp, Darling, 1988). Lack of knowledge about the handling of these meals once the foods leave the site for delivery and handling in the consumers' home is a particular concern. Because of these concerns, a six-state study of the handling of home-delivered meals in Meals-on-Wheels types of programs was conducted. Results are most significant to home-delivered meal programs, but are also useful to other types of foodservices that involve transport or delivery of food, including catering operations, commercial restaurants that provide home-delivery or take-out food, and those that operate in non-traditional locations.

### **Methodology**

A six-state survey (Indiana, Texas, Washington, New Hampshire, Virginia, and South Carolina) was conducted in selected home-delivered meal programs to determine general food safety behavior, packaging and holding of the meals, delivery practices, and subsequent handling of the meals by the clients in the home-delivered meal program. The study was funded through a USDA Cooperative Research Education and Extension Service grant completed in 2005. Selection of states was based on three factors including: geographic dispersion across the U.S. (states selected represented six out of ten regions as divided by the Administration on Aging's Regional Offices); size of program (representing all quartiles when states are ranked by size); and willingness to participate in the study.

Although the complete study was multifactorial, this paper will focus primarily on the effect of the type of packaging and meal trays on the temperature of the home-delivered meals. Choice of packaging and meal trays is considered critical because of the time required for delivery and transport and the delay that may occur in clients' homes before consumption.

Computer tags were first used to measure the temperature drop of actual home-delivered meals during delivery in home-delivered meal programs in order to determine general practices and their general temperature impact. It was then followed by more precise laboratory simulation of meal transport containers. Fourteen types of transport containers were evaluated. Food temperatures and time were recorded with computer tags and uploaded to a computer for analysis. For this portion of the study, foil type meal trays were filled with the freshly prepared sample food (mashed potatoes). Temperature tags were placed in a small waterproof plastic bag & placed in the center of the mashed potatoes. Meal trays were covered with the cardboard style lids (with the reflective side down) & the foil edges were crimped. Trays were placed in a warmer set at 170°F for two hours before being placed in the transport containers. Transport containers were then filled with meal containers (5 to 16 trays depending on the container). Transport containers were not opened for two hours while the tags recorded the temperatures.

Additional tests were done with the use of gel-containing heat packs. For the heat pack tests, the heat packs were microwave heated and placed on top of the meal trays as recommended by the manufacturer. In addition, three different meal tray types were tested using a similar methodology. They included a paperboard tray with food, an aluminum tray with a paper lid, and a Styrofoam container with a flip-top lid.

### **Results**

Results of the computer tag study in the home-delivered meal sites found, surprisingly, that at the time of portioning of the hot meals, the temperature dropped below 135°F. The temperature of the meals returned above 135°F if the meals were then placed in warming cabinets. If meals were instead placed in passive temperature holding containers, they remained in the temperature danger zone for the entire delivery period up until the time of consumption by the clients.

Testing of primary packaging revealed that, as expected, insulated meal containers such as Styrofoam trays were better at maintaining the temperatures as compared to the foil trays. This was found to be true for both the cold and hot meals. Greatest differences in temperature were found within the first ten minutes (over 20 degrees), but differences were still maintained at two hours with over ten degrees difference between the foam and foil trays.

A laboratory simulation of the effect of 14 types of secondary packaging (including nylon bags, plastic cooler style containers, electrical units that plugged into cigarette lighters, standard shipping containers, simple corrugated board boxes and plastic bags) and added heating packs was also conducted. Temperatures of meal containers dropped up to 46 degrees over a two hour period. Only electric containers increased temperature during the two hour holding period. Plain plastic bags performed the worst.

In addition, the position of the meal tray in the container did make a difference. With the exception of the shipping containers & the single compartment plastic container, the meal trays in the bottom of the container dropped in temperature fastest. The top trays dropped second fastest, and the middle trays maintained temperature the best. With the shipping containers, greatest heat loss was observed in the bottom trays, but the same trends for heat loss from the middle & top trays were not observed. For the single compartment plastic box, similar heat loss was found in all meal trays.

Table 1  
Average Temperature Changes in Unopened Containers (°F)

Container	30 min.	1 hr.	2 hr.
4	+1	+4	+8
9	+3	+4	+5
1	-4	-7	-11
5	-4	-7	-14
8	-8	-13	-20
2	-6	-11	-21
7	-8	-15	-26
6	-6	-11	-28
11	-7	-15	-29
12	-10	-17	-29
10	-13	-20	-30
13	-10	-20	-34
3	-8	-16	-44
14	-14	-27	-46

Temperature testing also revealed that nylon bags with zippers performed better than nylon bags with Velcro closures. The choice of nylon vs. plastic in terms of temperature maintenance was inconclusive (there were good choices for both categories). In addition, temperature maintenance was better for plastic boxes when the container held more meal trays. A similar effect was not seen with the nylon containers. Among the plastic containers, the two-sided unit had better temperature maintenance than the single compartment container. Finally, the single compartment plastic box appeared to result in faster temperature loss in the beginning, but slower temperature loss at two hours, perhaps because meal trays first had to heat the container before temperature maintenance was achieved.

In terms of insulation choices, the nylon unit with foamed insulation performed better than the three padded insulation containers. As expected, simple corrugated board boxes and plastic bags performed very poorly. Shipping containers with reflective bubble wrap performed better, but still not as well as other types of containers. Starting temperature did make a difference in determining the ending temperature after the two hour period, but the temperature loss trends were consistent. When trays were pulled from the transport container, the temperature of the remaining meal trays dropped faster. This means that temperatures would be worse than those shown in Table 1 during actual deliveries.

The use of heating packs improved temperatures, but the effect varied with the unit. Temperature improvement was between 5 & 31 degrees higher after two hours (a container with one of the highest heat losses was also the most improved with the use of a heat pack).

## Conclusions

In terms of safe food handling of the home-delivered meals, one of the longest and possibly most dangerous time periods for food temperature is the delivery time. Delivery of meals often takes two or more hours, although FDA guidelines suggest that potentially hazardous foods should be in the hazardous growth temperature range no longer than two hours. Managers need to calculate the appropriate route lengths/times, but it is also very important to select the most appropriate meal transport container for their operation. In addition, instructions need to be given to the drivers on the appropriate use of the transport containers. In this study, temperatures of the best and worst performing delivery containers differed more than 50°F after two hours. Fastest temperature loss was observed in the bottom trays (top trays were second fastest). Foamed insulation in transport containers performed better than padded insulation and zippers were better than Velcro. Similarly, foamed trays performed better than foil.

This study only evaluated 14 types of transport containers and three types of meal trays under laboratory conditions. Its results therefore may not be generalizable to other types of packaging, different seasonal conditions, or actual use conditions (when zippers or latches may not be fully closed, for example). Results of this study however, may provide some starting considerations to anyone involved in safely delivering food from one location to another. Temperature maintenance, through the choice of appropriate packaging for one's operation is a priority in keeping food safe.

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## **Reported Reflection by Hospitality Management Students Improves Leadership Practice Scores: Support for Reflection as a Leadership Learning Tool**

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### **Abstract**

Leadership practices of undergraduate students from eight universities reflecting on and changing their actions were compared to those who did not. Students who reported reflecting on their actions in classroom and work had significantly higher leadership scores in two and three leadership practices, respectively. Students reporting changing actions based on reflections in class had significantly higher scores in all leadership practices. Focus groups were conducted to ascertain leadership reflection examples. This research supports reflection as a potential leadership development tool although students may find reflection difficult.

Key Words: leadership, reflection, undergraduates, education, qualitative

### **Introduction**

Hospitality management programs prepare students for careers in foodservice, hotel, and tourism management. Educators, recruiters, and employers of hospitality management students perceive leadership to be important for job success and thus an important part of hospitality management curriculum (Blanch, 1998; Casado, 2003; Chung-Herrera, Enz, & Lankau, 2003; Hill & VanHoof, 1997; Nelson & Dopson, 2001; Perdue, Wood, & Ninemeier, 2002; Sneed & Scheule, 2001). Educators continue to struggle, however, with how to best teach leadership and have students practice leadership (Park, 2005). Hospitality management students reported they most frequently use leadership behaviors in class or at work (Arendt & Gregoire, 2005b).

Multiple leadership theories and models exist (Gregoire & Arendt, 2004). One common model by Kouzes and Posner (2002) is based on analysis of thousands of leaders' personal-best leadership experiences. This model identifies five leadership practices common to leaders: 1) Challenging the Process (Challenging) 2) Inspiring a Shared Vision (Inspiring) 3) Enabling Others to Act (Enabling) 4) Modeling the Way (Modeling) 5) Encouraging the Heart (Encouraging)

Posner and Kouzes (1988), utilizing the above five leadership practices, developed the Leadership Practices Inventory (LPI) to assess leadership behaviors. Posner and Brodsky (1992) later developed the Student-Leadership Practices Inventory (S-LPI), the only known valid and reliable instrument that assesses leadership behaviors in students. Use of this instrument with hospitality management students was found to be reliable (Arendt & Gregoire, 2005b).

Brown and Posner (2001) wrote, "leadership is not learned, rather it is learning" (p. 275). They studied the relationship between learning and leadership and found a positive relationship between how people learned and how they behaved as leaders.

Bennis and Thomas (2002) utilized interviews of 40 prominent leaders and found leaders reported a crucible which caused them to reflect and molded them into better leaders. Winch & Ingram (2004) discussed reflection in the workplace. Reflection can be a tool for managers to learn from their mistakes and successes. The connection between leadership and reflection has been discussed (Bennis & Thomas, 2002; Densten & Gray, 2001) yet no known empirical data exists to date. Therefore, the purpose of this study was to compare leadership practices between students who reported reflecting on their actions (reflectors) and those who did not (non-reflectors). Additional comparison was made between students who reported changing their actions (changers) based on their reflections and those who did not (non-changers). Examples of reflections based on the five leadership practice areas were gathered.

### **Methods**

This research employed a mixed-methodology utilizing qualitative and quantitative components. Initially, a student questionnaire was administered and later focus groups were conducted to capture student reflections within each of the five leadership practices. The university's Institutional Review Board approved the study.

### **Sample Selection**

This study, which focuses on hospitality management students, was part of a larger study assessing leadership behaviors in hospitality management and dietetics students (Arendt & Gregoire, 2005a, 2005b) and included universities that had a hospitality management and dietetics program located in the same college. A list of 11 possible U.S. universities was identified using these criteria. Program directors at each university were contacted for their commitment to the project prior to data collection. Directors were asked to have the questionnaires distributed in a freshman level and senior level hospitality management class. Eight universities geographically dispersed across the United States agreed to participate providing a potential of approximately 1,000 hospitality management students. Program directors were sent a final summary report of the project upon completion.

Participants for the focus groups were recruited from one senior-level course for hospitality management majors. A meal and a small number of extra credit points were given to students as an incentive to participate in the focus groups. To improve "show rate" to the focus group after voluntary sign up, students were reminded about the focus group one to two days prior to the actual focus group through e-mails, written invitations, and reminders in class. The goal was for each focus group to be comprised of six to eight undergraduate students from one university. Morgan (1998) noted the optimal number for a focus group is generally 6 to 10 participants. A total of three separate focus group sessions were held with 6, 6, and 7 students.

### **Quantitative Data Collection**

A student questionnaire was developed containing three sections. The first included 30 questions adapted from the S-LPI, used with author permission. The five practice areas of leadership were assessed: Challenging, Inspiring, Enabling, Modeling, and Encouraging with six leadership behavior statements for each area. Two scales were used for each of the 30 behavior statements. Scale A assessed the frequency of the leadership behaviors/actions using a five-point Likert-type scale with 1 = seldom or rarely 2 = once in a while 3 = sometimes 4 = fairly often and 5 = very frequently (Posner & Brodsky, 1992). Scale B assessed the context (home, school, work, clubs/groups or other) where the respondent most often exhibited the listed leadership behaviors.

The second section included questions about self behaviors based on reflection. Respondents answered with yes/no response for all context areas (home, class, work, and clubs/groups). The third section of the questionnaire contained demographic questions. Five hospitality management and dietetics educators and experts in the areas of questionnaire development, leadership, and curriculum development reviewed the student questionnaire. Suggestions were incorporated prior to pilot testing.

Thirty-one dietetics and hospitality management undergraduate students, not included in the sample, pilot tested the student questionnaire for clarity and understanding. Suggestions from the pilot study were incorporated into the final version of the student questionnaire. A packet containing a cover letter, program questionnaire, student cover letters, and student questionnaires were mailed to educators at each of the eight universities. Four weeks after the questionnaires had been mailed and one week prior to the return deadline, a reminder call was made to the educators who had not returned their completed packets.

### **Qualitative Data Collection**

Sample areas of exploration for the focus groups were developed with the assistance of experts in the area. Specifically, focus group participants were asked to give personal examples of reflections in each of the five leadership practice areas. Participants were given a verbal definition and written definition of the five leadership practices.

The researcher moderated the focus groups with the aid of an assistant moderator. Both the moderator and assistant moderator had previous experience with focus groups. A pilot focus group was conducted with undergraduate hospitality management students not included in the study sample. This pilot test allowed for equipment and procedural testing. Each focus group lasted approximately two hours. During the first half hour participants socialized and ate a meal provided by the researcher. Focus group participants were asked to sign a consent form prior to participating in the study.

### **Data Analysis**

Quantitative data analysis was done using SPSS (version 11.5, Chicago, IL). Data coding and entry were done according to procedures recommended by Dillman (2002). Descriptive statistics (including means, standard deviations, and frequencies) were calculated for all closed-ended items on the questionnaire. Based on Kouzes and Posner's work (1998), ratings of behavior statements were summed to create a score for each of the five leadership practices. Leadership practice scores were only calculated for students responding to all 6 behavior statements for that practice. Reliability estimates were

calculated for each leadership practice. Analysis of variance was used to compare leadership scores based on whether students reported reflecting on their actions and whether they reported changing their actions based on their reflections.

Audiotapes were used to record each focus group session. An experienced transcriptionist transcribed these tapes. The assistant moderator collected field notes during each focus group session. A debriefing session occurred between the moderator and assistant moderator immediately upon completion of each focus group. This allowed the researcher to capture information that might not be recorded on tape or in the notes including observations made by both the moderator and assistant moderator during the social time prior to the actual focus group. Focus group audiotapes were transcribed. Data were coded by the five leadership practices.

## Results and Discussion

Three hundred forty-five students completed usable questionnaires. Females accounted for 62% of respondents. The majority (70%) were junior or senior classification. Program enrollments ranged from 19-425 students. Coefficient alpha reliability estimates for the leadership scale scores were as follows: Enabling: .68, Encouraging: .78, Modeling: .68, Challenging: .65, and Inspiring: .75. Reliabilities reported in this study were comparable to others' work (Kouzes & Posner, 2006). Table 1 contains mean scores for behavior statements in each of the five leadership practices. In the context of classroom and work, students who reported reflecting had significantly higher scores ( $p \leq .05$ ) in two and three leadership practices, respectively, as compared to those that reported not reflecting.

Table 1  
Comparison of Mean Ratings for Leadership Practices by Context: Students who Reported Reflecting on Actions Compared to Those who Reported not Reflecting.

Leadership Practice <sup>c</sup>	Classroom <sup>a</sup>		Work	
	Reflectors <sup>b</sup> (n = 291-296)	Non-Reflectors (n = 34-36)	Reflectors (n = 297-301)	Non-Reflectors (n = 25-26)
Challenge	21.7 ± 3.5 <sup>d</sup>	19.81 ± 4.8	21.6 ± 3.7 <sup>d</sup>	19.7 ± 3.9
Inspire	21.5 ± 3.8 <sup>d</sup>	19.9 ± 4.4	21.5 ± 3.8 <sup>d</sup>	19.2 ± 4.0
Enable	24.0 ± 3.2	23.6 ± 4.0	24.0 ± 3.3	23.6 ± 2.5
Model	23.0 ± 3.5	22.1 ± 4.3	23.0 ± 3.6 <sup>d</sup>	20.9 ± 3.3
Encourage	23.2 ± 4.0	22.51 ± 4.7	23.3 ± 4.1	21.7 ± 4.4

<sup>a</sup> Context of leadership practices either as classroom or work. <sup>b</sup> Reflectors were students who reported reflecting on their actions. Non-reflectors were those who reported not reflecting on their actions. <sup>c</sup> Sum of action statement ratings; possible scores 5-30. Scale for statements: 1=seldom/rarely to 5=very frequently. Students had to complete all 5 statements related to the practice for a score to be calculated. <sup>d</sup> Analysis of variance comparing reflectors and non-reflectors,  $p \leq .05$ .

In the context of work, no significant differences in any of the leadership scores ( $p \leq .05$ ) were noted between students reporting they made changes based on their reflections and those that did not. Significant differences ( $p \leq .05$ ) were noted in the context of class for all five practice areas (Table 2). Those students reporting that they made changes

Table 2  
Mean Ratings for Classroom Leadership Practices for Students who Reported Changing Actions Based on Reflections (Changers) Compared to Those who did not (Non changers)

Leadership Practice <sup>a</sup>	Changers <sup>b</sup> (n = 273-277)	Non-Changers (n = 52-54)
Challenge	21.7 ± 3.5 <sup>c</sup>	20.1 ± 4.4
Inspire	21.5 ± 3.8 <sup>c</sup>	20.0 ± 4.2
Enable	24.2 ± 3.1 <sup>c</sup>	23.1 ± 3.7
Model	23.0 ± 3.4 <sup>c</sup>	21.8 ± 4.3
Encourage	23.4 ± 4.0 <sup>c</sup>	22.1 ± 4.7

<sup>a</sup> Sum of behavior statement ratings; possible scores 5-30. Scale for statements: 1=seldom/rarely to 5=very frequently. Students had to complete all 5 statements related to the practice for a sum rating to be calculated. <sup>b</sup> Changers were students reporting they made changes based on their reflections while non-changers were those reporting they did not make changes based on their reflections. <sup>c</sup> Analysis of variance. Significant difference at  $p \leq .05$ .

based on their reflections had mean practice scores higher than those who reported not changing their actions based on reflection (Table 2). Therefore, it appears that hospitality management students who utilize classroom reflection and make changes have higher leadership behavior scores or have utilized reflection to enhance their leadership behaviors.

Table 3 provides examples of illustrative comments of leadership behaviors by practices shared by students in the focus groups. Overall students had difficulty reflecting on their own leadership behaviors and often reverted back to examples of other leaders. Lashley's (1999) pilot study found hospitality students preferred learning styles different than those including reflection.

Table 3  
Hospitality Management Students' Reflections of Leadership by Practice Area

Leadership Practice Area
Comment
<b>Enabling Others to Act</b>
<ul style="list-style-type: none"> <li>"I'm the oldest— so I feel like that's my job, as being the oldest, is to set a good example and be a good model. I have to figure everything out first, and then tell them what I've learned. I have to help them. "</li> </ul>
<b>Modeling the Way</b>
<ul style="list-style-type: none"> <li>"An employee might be like, 'I don't know how to enter this into the computer properly. So, I'll be like, 'Let me go ahead and show you how this is done.'"</li> </ul>
<b>Encouraging the Heart</b>
<ul style="list-style-type: none"> <li>"I was working with my group (at Bible Study). I would say, "Okay, you guys are fine, you can do whatever you (want to) do. If you want to do something, you can do it, you can do it." I just tried to help people get it done and think [in a] positive way."</li> </ul>
<b>Inspiring a Shared Vision</b>
<ul style="list-style-type: none"> <li>"My brother just broke his neck and is paralyzed. It's really easy to be just like, "This sucks. I can't do anything." But, together, when I'm at home - it's kind of experimenting, I guess – to make him realize that, the future can be bright, we find different ways that he can get things off the counter. "</li> <li>"My boyfriend went down the wrong path and was in prison for a couple years, and realized that that's not thing he needed to do, and that's not the path that he wanted to go down. Because of that, he didn't get to graduate high school. Now that he has gotten his life back together and everything, I feel like I have constantly been encouraging him to go back and do his GED classes, and work hard, and he's been working full-time with his father.</li> </ul>
<b>Challenging the Process</b>
<ul style="list-style-type: none"> <li>"I live with 4 other girls. There was also a beehive in the basement that continually hatched bees. And none of the rest of my roommates – they just don't take the initiative. I ended up writing a letter to the city inspector and they also sent it to the property management company to get them to come and take care of this."</li> </ul>

Students in focus groups shared no leadership practice examples from the classroom. Generally, reflections were based on home-life experiences. This raises questions as students report that they most frequently exhibit leadership behaviors at work or school (Arendt & Gregoire, 2005b) yet were unable to verbalize these experiences in the focus groups.

Morrison and O'Mahony (2003) utilized reflection portfolios in an introductory hospitality class to help students understand concepts in relationship to their life experiences. Loo & Thorpe (2002) successfully integrated reflective learning journals into an undergraduate management course to improve individual and student team performance. Both students and faculty note difficulties in assessing student reflections as an assignment (Stewart & Richardson, 2000).

### Limitations

Questionnaires were distributed at only eight U.S. universities limiting generalizability of the study. Limitations are noted with the terminology used in the questionnaire as no definition was given for the word "reflection". Since the time of this study, the S-LPI has been revised with minor changes noted (Posner, 2004). Based on the nature of qualitative research, results from the focus groups can not be generalizable. Additional limitations with focus groups including participant free-loading and domination are noted. Development of an effective leadership reflection tool for classroom use and exploration into the use of reflection as a leadership development tool post graduation are continued research opportunities.

## Conclusion

Based on the results of this study, reflection appears to improve leadership practice scores. Reflection may be one way educators can enhance leadership behaviors in hospitality management students. Starting students practicing reflection while in school may enhance their ability to later transfer it into the workplace as hospitality management leaders.

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## **The Determinants of Novelty Preference for Corporate Meeting Destination Choice**

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### **Abstract**

This study attempts to explore the relationships between novelty preference for corporate meeting destination choice and consumption value, organizational structure, and personality. This study also posited that the anticipated relationships were moderated by perceived risk and budget. Data were collected from 75 corporate meeting planners using questionnaires. This study that employed multiple regressions found that consumption value and personality significantly influenced the preference for meeting destination choice. Interestingly, there were no statistical support found for the main effect of organization structure and moderating effects of perceived risk.

**Key Words:** meeting tourism; destination choice; novelty preference; consumption value; personality

### **Introduction**

The meetings sector of the tourism industry today is one of the most competitive and lucrative of market segments (Crouch and Louviere, 2004; Weber and Chon, 2002). Despite this fact, relatively very little academic research has been conducted concerning the consumption behavior of the two main players of this substantial market which include corporate and association markets. However, compared to the corporate meetings, the association meeting is gaining far more attentions from the researchers (Choi and Boger, 1998; Go and Zhang, 1997; Oppermann, 1996; Weber, 2001). The reason is because as opposed to the corporate organizations, associations are claimed to be relatively flexible with respect to choosing their meeting destination while in the corporate sector, business locations and headquarters are claimed to be commonly determined the selected meeting destination (Oppermann, 1996; Weber, 2001).

Even though the destination settings for corporate meetings are claimed to be generally conventional in nature (Oppermann, 1996; Weber, 2001), recent development has indicated that there is a growing interest among corporate organizations to hold their meetings in a less conventional or novel setting (Callan and Hoyes, 2000; Leask and Hood, 2001). This observation has lead to the major issue this research mainly attempts to address - "what are the factors that drive the choice of corporate meeting destination with respects to its novelty setting?" Dimanche and Havitz (1994) argued that novelty-seeking is one of the most important topical areas associated with decision-making process in tourism context that show great promise for better understanding the consumption of tourism. The development of rural, second-tier or regional tourism associated with novel destinations can help to increase employment opportunities, to generate economics activities as well as to provide a better environment in the rural areas (Lapping et al., 1989; Luloff and Swanson, 1990; Middleton, 1982; Oppermann, 1996; World Tourism Organization, 1998).

### **Background**

#### *Novelty Preference*

Novelty preference in this study is defined as the extent to which a corporate meeting planner prefers a destination setting that creates an unusual, unique and exciting meeting travel experiences. The novelty-seeking behavior in relation to pleasure travel has been studied by several researchers in the past (Basala and Klenosky, 2001; Bello and Etzel, 1985; Lee and Crompton, 1992) while its significance has not yet been investigated in the business travel such as in the meeting market. This present study attempts to answer a fundamental question of how the meeting destination consumption value, organizational structure as well as personality influenced the choice of corporate meeting destination. Since value has been identified as a crucial determinant of repurchase intention and loyalty (Petrick and Backman, 2002), it would seem to be an important issue to understand its impact on the competitive meeting market. Based on the notion that flexibility, change and adaptation are key elements of innovation (Georgsdottir and Getz, 2004), this study also specifically attempts to address the issue of whether openness of organization structure as well as adaptableness of meeting planner's personality affect the destination choice.

To better understand the choice process, this study also seeks to explain whether the relationships between the three factors and destination choice are moderated by perceived risk and budget (situational factors). Situational factors

have been found to influence the associations' meeting destination selection (Clark and McCleary, 1995). Perceived risk was operationalized as multiplicative functions of the decision importance and the uncertainty of the outcome as perceived by corporate meeting planners. Budget refers to perceptual measure of how large the budget allocation for meeting in comparison to the overall budget allocation for meetings for the whole year. A research model developed for this study is as the following figure.

#### *Consumption Value*

Based on Woodruff (1977), consumption value is defined as meeting planners perceived preference for and evaluation of meeting destination attributes, attributes performance and consequences arising from the use that facilitates the achievement of their goals. Um and Crompton (1990) contended that consumption value is important product-specific factor that acts as an input in the destination choice process. Value is seen as a complex construct in tourism with functional dimension interacting with socio-psychological dimensions (Bolton and Drew, 1991; Holbrook, 1994). These interactions make different contributions to the overall consumption experiences (Addis and Holbrook, 2001) which could be explained in terms of its level of novelty preferences for destination. Based on the experiential consumption concept, the relative weight of the destination's functional dimension (utilitarian-orientation) is expected to be greater than the weight of the non-utilitarian dimension for the consumption evaluation of a more conventional destination than a more novel destination.

Utilitarian consumption is characterized as more cognitively driven, instrumental, goal oriented and accomplishes a functional or practical task (Strahilevitz and Myers, 1998). Thus, it is logical to expect that: (i) *Hypothesis 1: The more utilitarian-oriented the consumption, the more likely a conventional destination will be preferred*, (ii) *Hypothesis 1a: The strength of the predicted relationship between utilitarian-oriented consumption and novelty preference will be greater under high risk situation compared with under low risk situation*, and (iii) *Hypothesis 1b: The strength of the predicted relationship between utilitarian-oriented consumption and novelty preference will be greater under low budget situation compared with under high budget situation*.

#### *Organization Structure*

Based on Robbins (1990), this study viewed organizational structure as having three major dimensions namely formalization, centralization and complexity. High structural formalization is argued to discourage new ways of doing things and reinforces the status quo while the concentration of decision-making authority prevents innovative solutions (Thompson, 1965). Organizational complexity is likely to have positive effects on human resource innovation because diversity in organizations results in diverse of ideas (Kimberly and Evanisko, 1981).

Literatures support the argument that organizations with flexible (open) structure tend to be better at innovating than those with rigidly structures (Hage and Aiken, 1970; Utterback and Abernathy, 1975; Zaltman et al., 1973). Based on the grounds that openness of structure refers to the structural combination of both low formalization and centralization, but high complexity, it is anticipated that: (i) *Hypothesis 2: The more open the structure of the corporate organization, the more likely a novel destination will be preferred*, (ii) *Hypothesis 2a: The strength of the predicted relationship between openness of structure and novelty preference will be greater under low risk situation compared with under high risk situation*, and (iii) *Hypothesis 2b: The strength of the predicted relationship between openness of structure and novelty preference will be greater under high budget situation compared with under low budget situation*.

#### *Personality*

The Five-Factor Model which consists of five personality traits (openness, conscientiousness, extraversion, agreeableness and neuroticism) was employed to operationalized the personality construct in this study. Open individuals are associated with interest for new ideas (Costa and McCrae, 1992) and varied experiences (McCrae, 1987). Similarly, the extraverts and conscientious people are also related to creativity (King et al, 1996). On the other hand, agreeableness may lead to conformity. Taggar and Irving (2004) found a negative relationship between neuroticism and adaptive behavior. Based on the above and the argument that flexible people tend to have preference for novelty (Georgsdottir and Getz, 2004), it is expected that: (i) *Hypothesis 3: The more adaptable the personality of a meeting planner, the more likely a novel destination will be preferred*, (ii) *Hypothesis 3a: The strength of the predicted relationship between personality adaptableness and novelty preference will be greater under low risk situation compared with under high risk situation*, and (iii) *Hypothesis 3b: The strength of the predicted relationship between personality adaptableness and novelty preference will be greater under high budget situation compared with under low budget situation*.

#### **Method**

### Sampling and Data Collection

The population of this study is defined as internal corporate meeting planners employed by services corporations listed on the Bursa Malaysia. A total of 75 meeting planners from 17 corporations or 60 percent response rate involved in this study. A simple random probability sampling was employed to select the corporations from the sampling frame of 32 corporations and the meeting planners representing each corporation were selected based on their substantial involvement in the decision-making process of meeting destinations. The data for this study was collected using mail questionnaires.

### Measurements

An initial pool of items for the measurement of novelty preference was generated from available measures and the context in which the measures were to be used. In addition, protocol analysis was employed to generate items that are more specific to the context of corporate meeting market. The initial items were refined and edited for content validity by a group of three expert judges who are academicians with research interest in services and tourism. The three judges were asked to evaluate each item either as being representative or not representative of the constructs. The final measure consists of 19 items and measured on a six-point scale. All dependent and independent variables in this study were measured on six-point scales to avoid the clustering of responses at the neutral point, which will turn out to make the result unreliable (Ling, 1998). The novelty preference scale recorded an excellent Cronbach's reliability coefficients of 0.91.

The theory of consumption value as proposed by Sheth et al. (1991) was mainly utilized to develop the measurement for consumption value. Apart from that, the same protocol analysis technique and the panel of experts judges described earlier were also employed. A total of 33 items were used to measure consumption value in this study with alpha of 0.85. Personality was measured using the Big Five Inventory (BFI) scale that comprised of 44 items developed by John et al. (1991). The Cronbach's alpha for the overall scales was 0.78. The measurement of perceived risk in this study was adapted from Kohli (1989) which was originated from the conceptualization of risk by Cunningham (1967). Budget was measured by using a single item newly developed for the study where respondents were required to response based on a six-point scale from (1) "very small" to (6) "very large".

### Data Analysis

A stepwise multiple regressions analyses were performed to test all of the hypotheses. The independent variables in the regression model were the main effects of (1) utilitarian-orientated consumption, (2) openness of structure, (3) adaptableness of personality, and the interaction effects of: (4) utilitarian-oriented X perceived risk, (5) openness of structure X perceived risk, (6) adaptableness of personality X perceived risk, (7) utilitarian-oriented X budget, (8) openness of structure X budget, and (9) adaptableness of personality X budget. The dependent variable in the regression model was destination choice (novelty preference). A moderation effect or interaction occurs when the magnitude of the effect of one independent variable on a dependent variable varies as a function of a second variable. All the variables that involved in an interaction were centered before being included in the regression model (Aiken and West, 1991; Cohen and Cohen, 1983).

### Results

As presented in Table 1, the regression equation for novelty preference for destination choice was significant at 0.01 level ( $F = 25.81$ ,  $p = 0.000$ ,  $R^2 = 0.52$ ), indicating 99 percents confidence in explaining the dependent variable. The resulting multicollinearity diagnostics also revealed that the VIF scores were all below 10, indicating that multicollinearity was not a problem in this regression model.

Table 1  
Result of Stepwise Multiple Regression

Independent Variables	Standardized Beta Coeff.	t	Sig. (p-value)	VIF
Consumption Factor ( <i>utilitarian-oriented</i> )	-.418*	-2.994	.001	1.67
Organizational Structure ( <i>openness</i> )	.184	1.441	.154	2.45
Personality ( <i>adaptableness</i> )	.284*	2.761	.007	1.57
Perceived Risk	-.054	-.513	.609	1.62
Budget	.373	.700	.486	1.79
Consumption Factor X Perceived Risk	-.033	-.263	.793	2.24
Consumption Factor X Budget	-.307*	-2.020	.006	1.86
Organizational Structure X Perceived Risk	-.024	-.246	.806	1.43
Organizational Structure X Budget	.078	.211	.843	2.12
Personality X Perceived Risk	-.044	-.443	.659	1.42
Personality X Budget	.316*	3.558	.004	1.19
* Significant at 0.01 level				

### *Main Effects*

With beta coefficient ( $\beta$ ) of -0.42 and p value equal to 0.001, statistical support was found for hypothesis 1. The results strongly indicated that utilitarian-orientation of consumption might have a negative relationship with novelty preference for meeting destination choice. With  $\beta = 0.18$  and  $p > 0.1$ , there was no statistical support found for hypothesis 2. The regression result showed that organizational structure did not significantly contribute to the prediction of novelty preference for meeting destination choice. With  $\beta = 0.28$  and  $p = 0.007$ , this study revealed that adaptableness of personality might have a positive relationship with novelty preference for meeting destination choice. Thus, hypothesis 3 was supported at 0.01 level.

### **Moderating Effects**

The results of multiple regressions indicated that there were no statistical supports found for all the three hypothesized moderating effects involving perceived risk. The results showed that two out of the three hypothesized moderating effects of budget were found to be significant. With  $\beta = 0.32$  and  $p = 0.004$ , the strength of the relationship (positive) between personality and novelty preference might be greater under high budget situation compared with under low budget situation, significant at 0.01 level. Secondly, with  $\beta = -0.31$  and  $p = 0.006$ , the strength of the relationship (negative) between consumption factor and novelty preference might be greater under low budget situation compared with under high budget situation, significant at 0.01 level.

### **Discussions**

The overall results of multiple regressions show that consumption factor is the most influential determinant of novelty preference. In its overall, these findings are consistent with the finding of Bonn et al. (1994) that indicate value plays the most prominent role in the decision on meeting destination. Value describes the benefits that the meeting planners seek from the consumption of a meeting destination. The finding that organizational structure does not have significant effect on the meeting destination choice is particularly surprising. It is logical to anticipate that the decision making process of corporate meeting destination is basically treated as routine in nature and therefore relatively not that critically important as compared to many other business decisions. Personality refers to the pattern of characteristic thoughts, feelings, and behavior that distinguishes one from another and that persists over time and situation (Phares, 1991). Generally, since the meeting decision is of organizational context, the significant effect of personality in this study provides evidence that personality of corporate meeting planners may also influence the process of setting and attaining their corporate goals as reported by Saunders and Stranton (1976).

The significant effects of both consumption factor and personality and the nonsignificant effect of organizational structure imply that the decision on corporate meeting destination choice with regards to its novelty is dominated by the non-organizational variables. This statement is supported by a widely accepted notion that novelty motive is not only basic in choice behavior but also to the human behavior in general (Faison, 1977). Another interesting finding is the absence of a moderating effect of perceived risk throughout this study. The most possible explanation for this is that the tendency for the decision on corporate meeting destination is perceived to be less risky or less important by the corporate meeting planner. Alternatively, the measurement of perceived risk may have been too global to capture its moderating effect. Budget in this study refers to the amount of money invested by the organization to plan and organize meeting. The presence of budget effects in this study indirectly implies that price or cost of the overall meeting event is also fundamentally important in the corporate meeting destination choice.

### **Main Managerial Implications**

The main implication of this study is related to the development of market segmentation strategies in the corporate meeting market. The overall findings of this study suggest that Malaysian corporate meeting market is best segmented using a two-stage segmentation approach. Under this segmentation, the meeting market will be first divided into groups of corporate organizations that share the same geographic location. At the second stage, the market could be further sub-divided using a second segmentation which is behavioral segmentation of benefits sought. Under this second stage of segmentation which is basically based on the two dimensional value of "utilitarian-nonutilitarian", the market will be eventually separated into two large segments; novelty-seekers and novelty-avoiders. Finally, the psychographic information mainly based on the personality profiles, which is found to be significantly related to novelty in this study, should be used to identify the individual meeting planners in each segment.

The findings of this study are also important in developing the product/service strategies. The strategy is particularly important in the novelty-seekers segment as a novel destination once consumed will no longer be perceived as novel by these meeting planners. Thus, a continuous product/service-mix improvement or differentiation is needed to bring back the corporate clients for their future events. A new and innovative service concept with differentiated offer needs to be introduced regularly to attain a sustainable good meeting market. For the segment of novelty-avoiders, the emphasis should

be given only on the improvement of the core product/service level rather than the supporting or augmented product levels. For this segment, concentration of the product strategy should be on managing the service quality. For this purpose, the emphasis on the relationship marketing through customized programs is of critical importance to make corporate clients feel special and to make them believe that the service provider has singled them out for extraordinary attention.

### Limitations and Suggestions for Future Research

An inherent limitation of this study pertains to its sampling frame. As the samples of this study are limited to the service sector and public listed companies, the results should not be generalized to the larger corporate meeting market context. This study also considered only the internal corporate meeting planners. The independent meeting planners might play an important role in the actual marketplace as well. The measurement of perceived risk may have been too global to capture its moderating effect in the context of present study. Based on the above limitations, several directions can be taken in future research on the corporate meeting destination. First, it would be academically interesting to extend the research framework developed in this study by incorporating other variables such as organizational culture. According to Kotler et al. (2000), corporate culture also plays an important role in the choice of meeting venue. Secondly, it would also be fascinating to conduct a nationwide survey on meeting destination choice to understand the meeting industry in great details. Extending this research to a larger population would help ascertain the significant influences of the consumption value and personality as well as the non-significant effect of structural dimensions on meeting destination choice.

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## Understanding the Role of Psychological Ownership in Customer Relationships

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### Abstract

This study conceptualizes psychological ownership (PO) (a state in which individuals feel as though the target of ownership is ‘theirs’) and investigates how customers form PO toward a company. The study develops and validates a PO measurement scale for use in relationship marketing research. The proposed framework incorporates such fundamental human relationship variables as sense of belonging, identification, and perceived control. An integrative model of PO, including antecedents and consequences, is developed and tested via structural equation modeling in the context of the restaurant industry. The article provides a discussion of theoretical and managerial implications.

**Key Words:** Psychological Ownership, Loyalty, Restaurant, Relationship Marketing

### Introduction

Relationship marketing (RM) addresses long-term customer loyalty issues beyond previously adopted frameworks, which involved customer satisfaction and service quality (Oh, 2002). Rao and Perry (2002) stated that such relationship exchanges are based on social bonds, i.e., investments of time and energy that create positive interpersonal relationships between the partners. Interpersonal relationships (social and personal) rely on both cognitive and emotional processes. However, the psychology underlying formation and development of such relationships is often inadequately understood. Thus, researchers have called for more innovative research on this subject.

A number of different RM frameworks emerged in the literature since the discussion of this new paradigm started (Grönroos, 1989; Morgan & Hunt, 1994). Morgan and Hunt (1994), for example, proposed a commitment-trust theory of RM, with trust and commitments as key mediating variables of customer behavioral intentions. Marketers often stress the importance of learning new strategies to build customer relationships (Bowen & Chen, 2001). Heskett (2002), for example, presented a five-level customer behavior hierarchy, ranging from customer satisfaction to “ownership.” Heskett suggests types of customers who are so loyal that they can be considered “owners” who believe they have a stake in the firm. Thus, firms need to seek and sustain such customer “owners” to receive the benefits of their commitment.

Psychological ownership (PO) theory, the topic of the present study, attempts to enrich the current RM framework. The central postulate of this theory is that people can develop feelings of PO and unique relationships with a variety of both material and immaterial objects (Pierce, Kostova, & Dirks, 2003). The individuals feel as if the target of ownership is “theirs” (e.g., ‘It’s mine’) (Pierce et al., 2003, p. 86). PO appears to be a central phenomenon in the lives of people from early childhood (Furby, 1978), and studying its effects on consumer behavior may provide valuable insight to marketing researchers and practitioners.

An integrative model including the antecedents and consequences of PO is developed and tested using restaurant firms. More specifically, the objectives of the study were to: 1) develop and test a conceptual model of PO, 2) examine how PO was formed, 3) investigate the antecedents and consequences of PO and their relationships, and 4) enrich the existing RM literature by introducing PO theory. The results indicate new opportunities that could change the way marketers promote and sell products and services and have a positive impact on the bottom line.

### Background and research hypotheses

The existing loyalty and RM paradigms only partially address the psychological nature of loyalty, and the topic requires further expansion. This refers to the state of the customer’s feeling loyal to a company with fervor of becoming a partner or an owner who has a stake in the success of the firm and is dedicated to contributing to the company’s improvement (Shoemaker & Lewis, 1999). This partnership-like relationship is reflected in psychological connections between the firm and the customer. A personal connection like this between a person and the object of his or her loyalty is reflected in Fournier and Yao’s (1997) analysis of committed relationships. Interviews conducted by these researchers uncovered the possessive nature of such relationships. For example, an interviewee revealed her relationship with a coffee

brand: “It’s special. I love it. It’s *my* Gevalia” (p. 461). This and other similar examples illustrate the psychological connections customers develop and pursue with brands and the connotation of ownership-like feelings in the connections.

*Psychological ownership theory* attempts to explain this connection or the psychological state of ownership (Pierce et al., 2003). Pierce et al. (2003) first argue that the sense of ownership is manifested in “the meaning and emotion associated with *my* or *mine* and *our*” (p. 86). Second, PO represents a relationship between an individual and an object (both material and immaterial). Third, an individual perceives an object (i.e., a firm) to have a close connection with the self (Furby, 1978; Pierce et al., 2003). Finally, the state of PO is complex and consists of both affective and cognitive components. “Psychological ownership is a state in which individuals feel as though the target of ownership or a piece of that target is ‘theirs’ (i.e. ‘It is mine’)” ... It reflects an individual’s awareness, thoughts, and beliefs regarding the target of ownership.

White (1959) argued that it was in the human nature to explore external environment. Such a desire stems from differences in the environment and desire for change or control in the environment through interaction with it. PO stems partly from the motive of being in control (Isaacs 1933; Pierce et al., 2003). *Control* is “the ability to intentionally influence environmental, psychological, and behavioral events” (Morling & Fiske, 1994, p. 719). People are motivated for control over the events that influence the environment. The construct of control is often referred to as *perceived control* (PC), i.e., “a flexible set of interrelated beliefs that are organized around interpretations of prior interactions within specific domains” (Skinner, 1995, p. 4). Customers can presume PC over aspects of their service experience (e.g., a specially arranged seating or influence over the service quality). PC in a restaurant environment results in positive feelings of being in charge and able to manipulate surrounding resources for one’s benefit (Pierce et al., 2003).

H1: Perceived control is positively related to PO.

Rudmin and Berry (1987) provided evidence that crafting (“I made it”) is recalled as a criterion of ownership. Pierce et al. (2003) argued that “people come to find themselves psychologically tied to things as a result of their active participation.” Individuals experience feelings of ownership toward the objects created by application of their skills and/or knowledge. Customers in the service industry often co-create services rendered by service companies (Bowen, 1990). *Customer participation* is “the degree to which the customer is involved in producing and delivering the service” (Dabholkar, 1990, p. 484). Customer participation in service delivery allows customers to obtain more knowledge about the company. Restaurant customers may express their service preferences to the serving staff or learn about special ingredients or cooking techniques of their order and make suggestions while in the restaurant to make their dining experiences more pleasant. The greater the knowledge about the target, the more intimate is the connection between the individual and that target (Pierce et al., 2003). Ford and Heaton (2001) suggest that “involved guests feel ownership in their experiences” (p. 50). This intimate knowledge and participation may strengthen the feelings of PO of the restaurant.

H2: Customer participation is positively related to PO.

People develop a social identity to satisfy their self-definitional needs by identifying with various social categories (e.g. gender, occupation, organizations, etc.). Pratt (1998) suggests that “organizational identification occurs when an individual’s beliefs about his or her organization become self-referential and self-defining” (p. 172). Pratt concludes that most definitions of identification involve value congruence, which occurs when individuals believe that the company has values and beliefs similar to those of their own, so called *customer-company identification*. For example, one may identify with Red Lobster because of the company’s environmentally friendly policies. People develop PO toward objects that share their values (Dittmar, 1992). A customer may identify his/her own values with the values of a hospitality firm and see the firm as a continuation of the self. Thus:

H3: Customer-company identification is positively related to PO.

*Sense of belonging* is a feeling at home and/or having a close relationship and affinity to a place (Seamon, 1979). It is an affective bond between an individual and a place that is constructed through the individual’s experiences and interactions with that place. A restaurant booth/table or a hotel room may be perceived as a “home base” for the duration of a service encounter. Many customers may even develop permanent feelings of ownership toward a particular place (e.g., “our restaurant” or “my hotel”).

H4: Customer’s sense of belonging is positively related to the PO.

Oh (2002) describes *relationship intention* as a long-term behavioral intention in contrast to a short-term *repurchase intention* (i.e., the likelihood that the customer will repurchase the same brand in the next purchase occasion). *Relationship intention* is defined as “the stated willingness to repurchase the same brand [repeatedly] in the long-run” (Oh, 2002, p. 286). Relationship intentions refer to “internalized” long-term attitudes of customers toward a firm. Beggan (1992) found that people experience a higher degree of attachment toward objects they feel they possess than toward similar objects they don’t feel they possess due to “mere ownership effect.” Strong feelings of PO are likely to result in a continuing relationship with the object of PO due to intimate psychological investments of the self in that object. Thus, people strive to continue relationships with the objects to which they feel PO.

H5: PO is positively related to relationship intention.

PO is motivational in nature. An individual experiencing feelings of PO has a vested interest in the object of PO due to “oneness” of object with the self. Thus, feelings of “mine” cause behaviors aimed at enhancing the object of PO (Beaglehole, 1932) and may result in excitement about the object that evokes a customer’s desire to share the experiences with others. The desire of being associated with a particular restaurant and significance of the PO object are likely to generate the willingness to share information about the restaurant. Casual conversations with neighbors and friends about the objects of their PO may include recommendations (i.e., WOM) to experience that object.

H6: PO is positively related to word-of-mouth communication.

*Willingness to pay more* refers to the tendency of customers to pay premium prices for the service rendered by a company. Customers who feel bonded with the objects of PO are more likely to spend more resources to obtain the benefits from those objects. For example, people may be more willing to pay more for the benefits of the dining experiences in their favorite “place” than those in other restaurants. This behavior is consistent with the individuals’ need for preserving and expanding self-identity and belonging to a place.

H7: PO is positively related to willingness to pay more.

Customers’ resistance to competitive offers, such as lower prices, convenient hours, and other benefits, is important for hospitality companies because of the industry’s fierce competition and relatively low switching costs. *Competitive resistance* is the customer’s tendency to disregard marketing offers of competitors in favor of his/her favorite service provider. Customers are deemed to “tune out” competitive messages and “even shun the trial of competitive brands” (Oliver, 1999, p. 37). PO theory suggested an intimate connection between the individual and the target of ownership. A stronger association with a target (Rudmin & Berry, 1987) and feelings of PO create preference for the target over other alternatives. This preference for the target object suggests a comparatively weak competitive power of other alternatives.

H8: PO is positively related to competitive resistance.

### **Research methods and design**

All measurement items, except for customer identification and demographics, were measured on a scale ranging from “very likely” to “very unlikely” and on a 5-point Likert scale ranging from “strongly disagree” to “strongly agree.” The items were chosen from research in customer behavior, RM, and psychology. Customer identification was measured on a 7- and an 8-point scale. Items scale means ranged from 2.33 to 4.54, item standards deviations ranged from .59 to 1.65, and Cronbach’s alphas ranged from .69 for customer-company identification and .90 for PO.

Data were collected via campus mail from the faculty/staff of a large university in the Mid-West. One week data collection period yielded 22.7 % response rate with 1,253 usable responses. After a listwise deletion, a sample size of 1,045 cases emerged. More than 57% of the respondents were female. The annual household income ranged from \$30,000-\$100,000 for 65% of the respondents. The average age was 44.8.

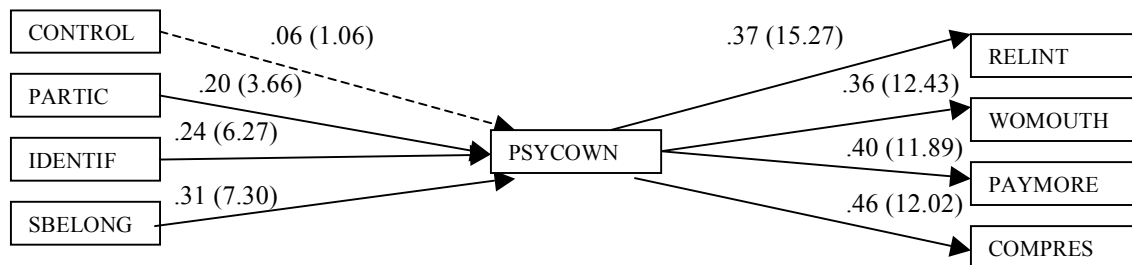
The proposed measurement model was tested via confirmatory factor analysis (CFA) using LISREL 8.5 program. Following recommendations described by Byrne (1998), one item was removed from the measurement model based on their large modification indices (MI). Large MI values in the theta-epsilon matrix also suggested correlated errors between indicators and three parameters were freed. CFA resulted in a marginal fit:  $\chi^2 (456) = 2331.92.32$ , ( $p = .00$ ), RMSEA = .063, CFI = .98, NFI = .97, NNFI = .97, GFI = .88, and AGFI = .85. All indicators loaded on the corresponding latent constructs ( $\lambda = .36$  to .99) ( $p < .01$ ). The  $R^2$ s for indicators ranged from 0.11 to 0.97. The average variance extracted (AVE) value were all larger than the suggested cut-off point, except for customer participation (.48). All AVE values also



exceeded squared correlations between all construct pairs, except for the correlation between perceived control and customer participation, suggesting generally evidence of discriminant validity of the constructs.

The structural model as specified in Figure 1 resulted in:  $\chi^2 (472) = 2749.12$ , ( $p = .00$ ), RMSEA = .068, CFI = .97, NFI = .96, NNFI = .97, GFI = .86, and AGFI = .84. The squared multiple correlations for latent constructs ranged from .13 to .44. All relationships between the latent constructs were found to be significant and positive in the predicted direction, except for the relationship between perceived control and PO ( $\beta = .06$ ,  $t = 1.06$ ). All the other path coefficients ranged from .20 to .46 and were significant ( $p < .01$ ), thereby supporting the research Hypotheses 2 and 5, respectively. Customer identification appeared to have a significant positive effect on PO (H3). In addition to participation, sense of belonging was a positive antecedent of PO (H2). The significant positive effect of PO on relationship intention (H6), word-of-mouth communications (H7), and willingness to pay more (H8) was also positive as stated in the model. Figure 1 contains path coefficients,  $t$ -values, and standard errors.

Figure 1.  
Proposed model of PO, and its antecedents and consequences.



### Discussion and implications

Theoretical expositions by Pierce et al. (2003) laid foundations for the proposed relationships between PO and its antecedents. A conceptual model was developed to examine the proposed relationships among these variables. The structural model exhibited a marginal fit to the data. Except for the path between perceived control and PO, all the other path coefficients were significant ( $p < .01$ ).

Identifying PO as a mediating variable and determining its effect on consequences such as relationship intention and word-of-mouth is critical to the research on consumer behavior and theory of RM. This study suggests that the customers who feel high levels of PO toward a restaurant are also likely to continue their relationship with the establishment, resist competitive offers, and recommend the restaurant to others. However, the marginal fit of the model suggests needs for improving measurement accuracy and complexity of the relationship between PO and its consequences. There might be some missing variables that cause the behavioral intentions along PO. Trust, commitment (Morgan & Hunt, 1994), and customer value (Oh, 2002) are often cited in the RM literature as additional mediating variables.

Results of the study indicated the effect of PO on behavioral intentions. Therefore, restaurant firms are advised to invest in marketing strategies to evoke feelings of PO. Restaurant managers may recognize that people tend to continue relationships with the objects of their PO. Restaurant firms should attempt to identify such psychologically committed customers and implement tactics that strengthen customers' beliefs of belonging to the group of preferred customers who may influence the management company.

Customers' devotion and experience of PO stem from their active participation in the dining experience. Customers often provide feedback to the restaurant staff and managers/owners on the various aspects of operation. Managers should accommodate customers' desires and needs – indicating customers' importance and immediate relevance for the success of their business. Such an attempt to integrate customer participation should be clearly communicated to the customers. Restaurant managers could also develop a set of values represented by the restaurant (e.g., environmentally friendly) or create a restaurant identity by learning about values of their customers. This restaurant identity should clearly be communicated to (potential) customers. Restaurants should consider tactics and dining room designs to evoke feelings of belonging in customers.

Geographical limitations of the study might have influenced the results of the research. Respondents' comments contained "complaints" about limited dining choices in the area. Future studies need to address these limitations by conducting studies in locations with diverse and multiple dining choices. The research design of the study was cross-sectional. Causal relationships among the constructs may be better examined in a longitudinal study. Despite these

limitations, the current cross-sectional study provided initial evidence for the relationships among the constructs. Future research should focus on measurement item purification and refinement and consider a more diverse population with a greater number of available dining choices.

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## Antecedents and Consequences of Brand Personality in the Upper-Upscale Hotel Industry

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### Abstract

This study investigated the relationships between brand personality and its antecedents and consequences in the upper-upscale hotel segment. Four dimensions of brand personality (sincerity, excitement, competence, and sophistication) were confirmed. Study results revealed the significant mediating effect of trust in the relationship between brand personality and loyalty. The theoretical and practical implications of this study's findings are included to assist both academicians and professionals in the lodging industry in enriching their understanding of customers' perceptions of and attitudes toward hotel brand and in developing the basis of a brand positioning strategy and consumer segmentation.

Key Words: Brand loyalty, brand personality, service quality, trust

### Introduction

Customers often make decisions about hotels based on their perception of a specific hotel's brand name (Jiang, Dev, & Rao, 2002). Thus, building and managing strong brands are key drivers of success in the lodging industry, where little differentiation is found among product attributes in the same hotel segment (Bowen & Shoemaker, 1998; Jiang et al., 2002). Since the 1990s, many hotels have become interested in relationship marketing as a way to distinguish their brands from others in a mature and competitive market (Bowen & Shoemaker, 1998). The goal of relationship marketing is to build customers' loyalty based on factors other than pure economics or product attributes. One of the factors used to achieve this goal is brand personality (Aaker, 1997).

Aaker (1997, p. 347) defined brand personality as "the set of human characteristics associated with a brand." Drawing on Aaker's (1997) definition, Fournier (1998, p.368) further elaborated on the definition of brand personality as "a set of trait inferences constructed by the consumer based on repeated observation of behaviors enacted by the brand at the hand of its manager, that cohere into a role perception of the brand as partner in the relationship dyad." In addition, brand personality is known as a central driver of consumer preference and usage (Biel, 1993) and serves as a common denominator that can be used to market a brand across cultures (Plummer, 1984).

Despite the implicit assumption that brand personality contributes to the long-term success of a brand, little research has explored sources and impacts of brand personality in the lodging industry. The purpose of this study was to investigate the antecedents and consequences of brand personality and their impacts on brand loyalty. Specifically, the authors developed a framework (see Figure 1) for understanding the symbolic use of brands in the upper-upscale hotel industry. The proposed framework (1) uses a multidimensional conceptualization for the brand personality construct; (2) relates price, user imagery, and service quality as antecedents of brand personality; and (3) specifies trust as a mediator of the brand personality-loyalty relationship.

### Theoretical Background

#### *Brand Personality*

"Young, spirited, and exciting" or "nonconforming, unique, and fun." Which sounds more like you or do they sound like someone you would like to be associated with? These are brand personality traits that consumers relate to Pepsi and Dr. Pepper brands, respectively (Aaker, 1996). Consumers readily assign both positive and negative human characteristics to products (Aaker, 1997; Triplett, 1994). They often interact with brands as if they were people, especially when the brands are attached to meaningful products (Aaker, 1996).

Until recently, however, research on brand personality has been limited by a lack of valid and reliable measurement scales. Most existing brand personality scales have been "ad-hoc" and atheoretical in nature; they were

developed for a specific research purpose. Other brand personality scales have been based on human personality scales that have not been validated in the brand context (Aaker, 1997). Based on qualitative and quantitative research, Aaker (1997) developed a brand personality scale (BPS). The development process assured the validity, reliability, and generalizability of the scale in the context of brands. A total of 42 personality traits of the BPS were identified on five dimensions: sincerity, excitement, competence, ruggedness, and sophistication.

The five dimensions of the BPS have successfully described the personalities of many strong brands (Aaker, 1996). For example, Hallmark was very high on sincerity while Levi's was high on ruggedness. Like a person, a brand can have a complex personality that ranges across the dimensions. For instance, McDonald's was rated high on both sincerity and competence. In an application of Aaker's BPS in different restaurant segments, quick service restaurants and casual dining restaurants were distinguished based on the five dimensions of the BPS, but distinction among the restaurants in the fine-dining sector was not successful (Siguaw, Mattila, & Austin, 1999).

Why do the brands in the same product category have different brand personalities? The answer to this question would help marketers and brand managers understand how this type of brand personality is developed. The perception of brand personality traits can be influenced by any direct or indirect contacts that a consumer has with a brand (Plummer, 1984). Service quality, user imagery, and price have been considered antecedents of and linked with brand personality, where as trust and brand loyalty are treated as consequences of brand personality in this study (Aaker, 1996; Aaker, 1997; Keller, 1993; Plummer, 1984).

#### *Antecedents of Brand Personality*

The perceived brand personality traits can be established by any direct or indirect contact that the consumer makes with a brand (Keller, 1993; Plummer, 1985). Personality traits become connected to a brand in a direct way by the generalized user of the brand (Aaker, 1997). Personality traits are also networked with the brand in an indirect way through marketing plans (product-related attributes, price, advertising, and distribution channel) and brand identities (brand name, logo, or symbol), (Batra, Lehmann, & Singh, 1993). Similarly, Fournier (1998) delineated the process of brand personality formation from the perspective of the consumer-brand relationship. The implementation of marketing plans can be regarded as a subset of behaviors fulfilled by the brand in its relationship role (Fournier, 1998). The observed behaviors are perceived as trait language that provides the cornerstone of the personality evaluative concept (Srull & Wyer, 1989). The reasoning behind this assertion is to consider marketing plans to be a subclass of behaviors from which the brand traits are inferred and on which the brand personality is based (Olson & Allen, 1995).

#### User Image

Brand images are associated with stereotypes of the typical users (Grubb & Grathwohl, 1967). The personalization of the brand refers to the degree to which product or service usage can be attributed to a generalized image of the user (Sirgy, 1982). User imagery is defined as "the set of human characteristics (traits) associated with the typical user of a brand" (Aaker, 1996, p.170). It may be viewed as the most significant antecedent since the personality trait of users of a brand is directly intertwined with the brand for self-expressive or symbolic purpose (Aaker, 1997; Keller, 1993).

User imagery can be shaped through consumption experiences, interaction with brand users, advertising, or word-of-mouth (Keller, 1993). The brand demographics (e.g., gender, age, social class, etc.) is seen in dimensions of brand personality and regarded as the salient personality characteristics (Batra, Lehmann, & Singh, 1993). For example, Volkswagen Beetle is perceived as feminine whereas Ford Mustang is perceived as masculine. JW Marriott is considered upper-class and Fairfield Inn is perceived as blue-collar. Such demographic factors have an influential effect on brand personality and are inferred directly from the user imagery (Aaker, 1997). Plummer (1985) contends that one component of brand image is the brand personality characterized by personality descriptors (e.g., youthful, gentle, etc.) and that typical users underlie the brand personality.

Hypothesis 1: User imagery is positively associated with the brand personality.

#### Service Quality

Zeithaml (1988, p. 3) defined perceived service quality as "the consumer's subjective judgment about a product's overall excellence or superiority." Specifically, perceived service quality is user-based approach (Garvin, 1983) rather than a manufacturing-based approach using a predetermined standard. Therefore, personal consumption experiences and situations and unique needs influence the consumer's subjective evaluation of quality. For instance, high-perceived service quality indicates that customers identify the differentiation and superiority of the brand through the long-term experience with a brand (Yoo, Donthu, & Lee, 2000).

This research draws on the reasoning that such consumers' subjective, global judgment of service quality is formed by experiencing specific service quality attributes (e.g., facility, aesthetics, employee service, etc.) evaluated along five dimensions: tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman, Zeithaml, & Berry, 1988), that the service quality is viewed as the subclass of brand behaviors from which the brand traits inferences are made, and that the trait inferences make up the brand personality in customer minds. Furthermore, Aaker (1996) asserted that product and service attributes/quality affect the perceived brand personality. Service quality is believed to represent the fundamental and subjective level of a brand (Faircloth, 1996).

Hypothesis 2: Service quality is positively associated with the brand personality.

#### Perceived Price

Price is a non-product-related association (Keller, 1993), but it is important because consumers often develop beliefs about the price and value of a brand and organize their product category knowledge in terms of the price levels of different brands (Blattberg & Wisniewski, 1989).

Price has dichotomy properties: objective price and perceived price. Objective price is the actual price (an objective external characteristic) of a product (Dodds, Monroe, & Grewal, 1991) whereas perceived price is subjective internal impressions that are derived from the perception of price (Jacoby & Olson, 1977). Consumers do not always rely on objective price. Instead, they interpret perceived price in ways that are meaningful to them (Dickson & Sawyer, 1985; Zeithaml, 1982). Marketing managers use price as an important extrinsic cue of product or service positioning and benefit. This occurs commonly in the lodging industry where hotel classes are clearly manifested by pricing strategies. With different pricing strategies, Ritz-Carlton belongs to luxury class whereas Motel 6 is perceived as budget tier. That is, the level of brand pricing indicates product or service class (Blattberg & Wisniewski, 1989) from which customers infer the brand traits (e.g., reliability, successful, upper class), thereby affecting the brand personality.

Hypothesis 3: Perceived price is positively associated with the brand personality.

#### *Consequences of Brand Personality*

A unique brand personality in consumer minds can lead to emotional bond to the brand (Biel, 1993), resulting in trust and loyalty (Fournier, 1994; Sirgy, 1982). Explications of such consequences can be derived from trust and consumer-brand relationship.

#### Trust

Morgan and Hunt (1994, p. 23) defined trust as "existing when one party has confidence in the exchange partner's reliability and integrity." Another definition of trust is that it is a "generalized expectancy" of how exchange partners will perform in the future (Anderson & Narus, 1990). A "generalized expectancy" is elicited both from a type of cultural environment of how firms are expected to perform and from encounters within the relationship (Sabel, 1993). Aforementioned definitions imply that trusted service providers are dependable and relied on with a "generalized expectancy" of delivering what they promise and that the trust is the cornerstone of building up the relationship with people, firms, or brands. In line with such definitions, this study draws on Moorman, Zaltman, and Deshpande's (1992, p. 315) definition of trust as "a willingness to rely on an exchange partner in whom one has confidence", which characterizes the trust as belief or expectation and a behavioral intention.

Fournier (1994) contended that brand personality enhances trust level. The brand personality-trust relationship rests on the premise that customers make brand trait inferences that comprise the brand personality based on repetitive observation of brand behaviors exercised by user imagery, product or service quality, and marketing plans (Aaker, 1997; Fournier, 1998). Then, the trait inferences further cohere into generalized inferences of the exchange partner quality over time (Aaker, Fournier, & Brasel, 2004), and that the partner quality inferences are used to assess a brand as an exchange partner (Fournier, 1998).

Specifically, in developing the relationship with the partner, the important subset of trait inferences lies in the assessment of partner's capabilities and efforts toward nurturing the relationships (Altman & Taylor, 1973). Such trait inferences subsume the partner's dependability and reliability (Boon & Holmes, 1999), trustworthiness (Holmes & Rempel, 1989), accountability (Altman & Taylor, 1973), and expectancy of whether the partner keeps the promise (Iacobucci, Ostrom, & Grayson 1995) and solves the problem (Sirdeshmukh, Singh, & Sabol, 2002). Most of which embrace the characteristics of trust and are likely to have major effects on measuring partner capabilities and intentions of sustaining partner relationship (Aaker, Fournier, & Brasel, 2004). These trait inferences form the partner quality inferences that are used to measure beliefs about the relationship (Fletcher & Kininmonth, 1992) and trust and loyalty levels (Sirdeshmukh et al. 2002). From the perspective of the consumer-brand relationship, the brand personality has sufficient characteristics to arouse trust through the generalized perception of brand partner quality inferences.

Hypothesis 4: Brand personality is associated with trust.

#### Brand Loyalty

Oliver (1997, p. 392) defined brand loyalty as “a deeply held commitment to repurchase or repatronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior.” Study findings by Chaudhuri and Holbrook (2001) indicate that trust affects brand loyalty from the perspective of brand commitment in relationship marketing (Gundlach, Achrol, & Mentzer, 1995; Morgan & Hunt, 1994). Commitment has been defined as “an enduring desire to maintain a valued relationship” (Moorman et al., 1992, p. 316). Morgan and Hunt (1994) found that trust led to commitment in business-to-business relational exchanges because relationships characterized by trust were so highly valued that parties would desire to commit themselves to such relationships (Hrebiniak, 1974). Trust is thus a major determinant of committed relationship (Morgan & Hunt, 1994). Trust also enhances repatronage because brand trust enables customers to rely on the ability of the brand to perform its promise (Chaudhuri & Holbrook, 2001). Especially in the service industry, a service entity should provide the circumstances that foster trust among customers so that they make confident predictions about its future performance since they cannot buy a service before experiencing it. In summary, trust as derived from a distinctive, desirable brand personality is a key-mediating construct that holds the consumer-brand relationship (brand loyalty) together across different situational contexts. Well-perceived brand personality provides a foundation for the creation of brand preference, premium, and loyalty.

Hypothesis 5: Trust is positively associated with brand loyalty.

#### Brand Personality-Brand Loyalty Link

Brand personality provides a basis to personalize a brand by associating human traits with the brand. Consumers regard the brand as a human characteristic (Plummer, 1985) and tend to anthropomorphize the brand (Aaker, 1997). Consumers’ humanizing of a brand can build on the animism theory -- that people are inclined to animate objects to promote interactions with the inanimate world (Fournier, 1998). Consumer tendencies to anthropomorphize the brand imply a willingness to view the brand as a relationship partner (Fournier, 1998).

To delineate richer elaboration on consumer-brand relationship than brand loyalty, Fournier (1998) classified six brand relationship quality constructs as “love/passion, self-connection, commitment, interdependence, intimacy, and brand partner quality.” Brand love/passion occurs when the affect underlying the strength of the brand relationship is stronger than the basic aspects of brand preference or loyalty. Brand love/passion indicates the extent of affect associated with the brand attitude. Brand self-connection shows the degree to which the brand is used for a consumer to express a significant aspect of self. Brand interdependence sustains strong consumer-brand relationship, bringing about frequent brand usage and an increased range of brand-related activities. Brand commitment implies “attitudinal brand loyalty that includes a degree of dispositional commitment in terms of some unique value associated with the brand” (Chaudhuri & Holbrook, 2001, p. 82). Brand intimacy is firmly established with beliefs in a product’s superiority. Lastly, brand partner quality occurs when consumers evaluate the brand performance in its partnership role with evaluative criteria, such as dependability, reliability, trust, and respect. Such consumer-brand relationships are vitalized by the consumer tendency to animate the brand via brand personality. As consumers value the brand personality, they are likely to enhance the behavior intentions (Aaker, 1996) and loyalty (Fournier, 1994) through relationships with the brand.

*Hypothesis 6: Brand personality is positively associated with brand loyalty.*

#### **Methodology**

A self-administered questionnaire was developed to assess the customers’ perception on each construct. Service quality (e.g., This hotel provides me with superior service quality as compared to any other hotel brands in its category), user imagery (e.g., A typical guest at this hotel seems successful.), and perceived price (e.g., The hotel rate is high) were considered as exogenous variables, whereas brand personality (i.e., sincerity, excitement, competence, sophistication [Aaker, 1997]), trust (e.g., I feel that this hotel is very undependable – very dependable [Sirdeshmukh, et al., 2002]), and brand loyalty (e.g. How likely are you to stay at this hotel for your next trip?[Back, 2001]) were treated as endogenous variables. A 7-point Likert (1 = Strongly disagree/ very unlikely; 7 = Strongly agree/very likely) and semantic differential scales were used to measure the indicators. The ruggedness dimension of the original brand personality scale (Aaker, 1997) was deleted due to the nature of the selected hotel brand class.

Guests who stayed in the same luxury hotel brand in two metropolitan cities were surveyed. The prevailing belief was that the impacts of the brand personality were more evident in the luxury segment, where tangible attributes are not distinguished among the different brands. Confirmatory factor analysis was conducted to confirm the underlying structures

of the brand personality 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 8.54.

## Results

The sample population in this study was composed of individuals who stayed at a same brand upper-upscale hotel in two metropolitan cities. The questionnaires were distributed to 1,020 individuals when they checked into the hotels. Of the 1,020 distributed questionnaires, 435 were returned. After eliminating the unusable responses, 415 responses were coded for data analysis, resulting in a response rate of 40.7%. Sixty five percent of respondents were male travelers (270). The median age group of the respondents was 41 to 50 years, and the median household income group was \$150,001 - \$300,000. A majority of the respondents (324 respondents, 78%) indicated that the purpose of their stays was for a solely business-related trip. Another 12% of the respondents (49 respondents) indicated that their trips were somewhat business-related trips. Among those business travelers, 72% of the respondents made the decision to stay at the hotel by themselves. This implies that the sample selection was appropriate to continue data analysis.

Because the data were collected from two different locations of the same branded hotel, 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 shown that there was no significant difference among regression coefficients between two data set. Thus, data were 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 exceed 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: ( $\chi^2(366) = 721.02$ ,  $\chi^2/df = 1.97$ , RMSEA = .05, CFI = .93, NNFI = .92). All of the indicator loadings for constructs were significant ( $p < .01$ ).

Discriminant validity exists when the average variance extracted (AVE;  $\rho_{vc(n)}$ ) 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 brand personality construct (.67) exceeded the square of the intercorrelation (shared variance) between user imagery and brand personality (.61).

### 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 service quality, user imagery, perceived price, sincerity, excitement, competence, sophistication, trust, and brand loyalty. The results showed good fit for the nine-factor model,  $\chi^2(366) = 721.02$ ,  $\chi^2/df = 1.97$ , RMSEA = .05, CFI = .93, NNFI = .92. The  $\chi^2/df$  value of 1.97 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.

Specifically, four dimensions of brand personality have been confirmed. Sincerity, excitement, competence, and sophistication were distinctively identified as underlying structures of brand personality. This confirms Aaker's (1997) brand personality dimensions and proved its applicability to the lodging industry. Among those four dimensions, competence showed the highest mean (5.96), indicating the sample hotel's brand image.

### Structural Model Results

The theoretical model was tested (see Figure 1). For this model, goodness-of-fit and practical indices were as follows:  $\chi^2(160) = 360.12$ ,  $p = .00$ , 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 service attributes, user imagery, and perceived price to trust and brand loyalty were included. This model produced the following statistics:  $\chi^2(154) = 344.28$ ,  $p = .00$ , RMSEA = .056, CFI = .95, NNFI = .94. The difference in fit between the competing model and the theoretical model was not significant ( $\Delta\chi^2 = 15.84$ ,  $\Delta df = 6$ ,  $p > .01$ ), which indicates that the theoretical model was more parsimonious than the first competing model.

Table 1  
Results of Confirmatory Factor Analysis<sup>a</sup>

Construct	Internal Consistency	Item	Factor Loading <sup>b</sup>	t-Value <sup>c</sup>
Service Quality	0.95	Superior service quality	0.91	26.31
		Performs better service <sup>d</sup>	0.96	
		More benefits	0.95	30.33
User Imagery	0.87	This hotel guest seems ~		
		like successful	0.78	13.04
		like confident <sup>d</sup>	0.91	
Perceived Price	0.90	like a leader	0.76	12.58
		This hotel rate is high <sup>d</sup>	0.92	
		The price is very expensive	0.88	16.92
Sincerity	0.81	The hotel rate is very unreasonable	0.81	14.93
		Wholesome	0.81	12.23
		Down-to-earth	0.81	12.89
Excitement	0.76	Honest	0.82	13.94
		Cheerful	0.82	12.72
		Daring	0.70	7.62
Competence	0.80	Spirited	0.69	8.00
		Imaginative	0.68	8.00
		Up-to-date	0.75	8.60
Sophistication	0.92	Reliable	0.74	11.80
		Intelligent <sup>d</sup>	0.85	
		Successful	0.72	11.65
Trust	0.94	Upper class	0.90	13.82
		Charming <sup>d</sup>	0.90	
		Glamorous	0.89	12.92
Brand Loyalty	0.87	Hotel is dependable	0.92	23.60
		Hotel is competent <sup>d</sup>	0.94	
		Hotel is of high integrity	0.92	23.55
		Willingness to revisit	0.72	9.92
		Willingness to recommend	0.72	9.84
		Commitment	0.84	11.22
		First choice	0.92	12.13

<sup>a</sup> Fit indices:  $\chi^2(366) = 721.02$ ,  $\chi^2/df = 1.97$ , RMSEA = .05, CFI = .93, NNFI = .92; <sup>b</sup> Standardized loading estimates

<sup>c</sup> Based on two-tailed tests; for t-values greater than 1.96,  $p < .05$ ; <sup>d</sup> Parameter fixed at 1.0 for the maximum-likelihood estimation. Thus, t-values were not obtained for those fixed.

The second competing model, the direct path from brand personality to brand loyalty was deleted from the theoretical model. The goodness-of-fit and practical indices for this model were as follows:  $\chi^2(161) = 362.66$ ,  $p = .00$ , RMSEA = .054, CFI = .95, NNFI = .94. Like the previous model, the difference in fit between this model and the theoretical model was not significant ( $\Delta\chi^2 = 2.54$ ,  $\Delta df = 1$ ,  $p > .01$ ), 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.



Table 2  
Measure correlations, the squared correlations, and AVE

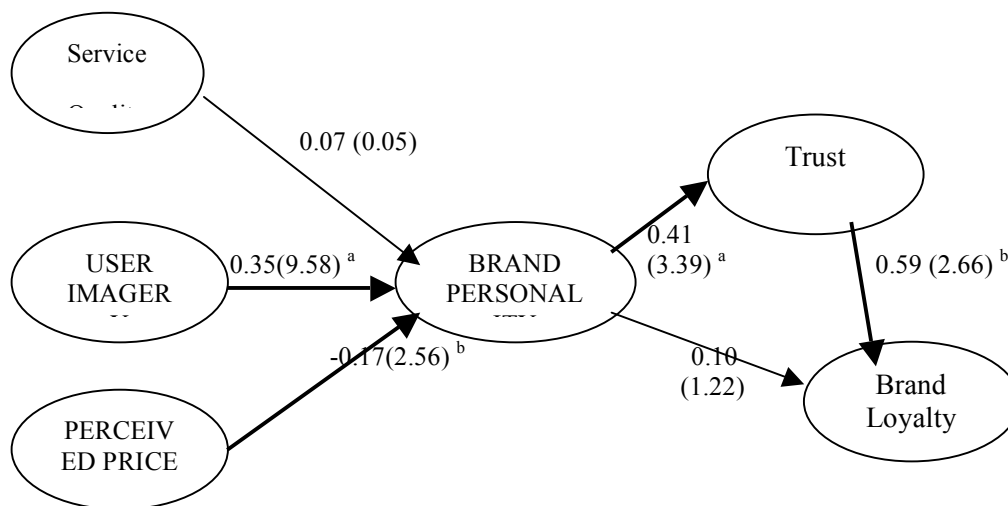
Correlations among latent constructs (squared) <sup>a</sup>							
Measure	SQ	UI	PP	BP	Tr	BL	AVE <sup>b</sup>
Service Quality (SQ)	1.00						.87
User Image (UI)	.19(.04)	1.00					.53
Perceive Price (PP)	-.45(.20)	.18(.03)	1.00				.66
Brand Personality (BP)	.18(.03)	.45(.20)	-.23(.05)	1.00			.70
Trust (Tr)	.22(.05)	.20(.04)	.01(.00)	.33(.11)	1.00		.88
Brand Loyalty (BL)	-.12(.01)	.04(.00)	.08(.00)	.18(.03)	.48(.23)	1.00	.69
Mean	6.45	5.35	4.52	5.22	5.65	5.95	
Sd	.72	1.00	1.28	1.24	.86	.45	

<sup>a</sup> Correlation coefficients are estimates from LISREL.  $p < .01$ , bolded coefficients were significant at the .01 level.

<sup>b</sup> All average variance extracted (AVE) exceeded .50, showing construct validity.

Both user imagery and perceived price showed significant impacts on brand personality ( $\gamma_{12} = 0.35$ ,  $t = 9.58$ ,  $p < .001$ ;  $\gamma_{13} = -0.17$ ,  $t = 2.56$ ,  $p < .01$ ). Based on this result, user imagery positively influenced brand personality. As Plummer (1984) argued, user imagery was the most powerful antecedent of brand personality. Note that the meanings of three items of perceived price have a negative connotation. Since the test hotel was an upper-upscale hotel, perceived price had a positive association with its brand personality, competence.

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



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

Next, the effects of brand personality on trust and brand loyalty were tested. The regression path from brand personality to trust was significant ( $\beta_{21} = 0.41$ ,  $t = 3.39$ ,  $p < .001$ ). This result was consistent with Bartra et al.'s (1993) suggestion that a well-established brand personality result in greater emotional ties to the brand trust. However, the direct effect of brand personality on brand loyalty was not significant. Rather, it was evident that the mediating effect of trust took a place in the relationship between brand personality and brand loyalty. The mediating effect of trust was evident in the significance of both the direct effect of brand personality on brand loyalty and the direct effect of trust of brand loyalty, while the direct effect of brand personality on brand loyalty was not significant. In other words, customers became brand loyal after they showed some level of trust in a brand.

Finally, as mentioned earlier, the path between trust and brand loyalty was tested. As Figure 1 indicates, the standardized regression coefficient between trust and brand loyalty was significant ( $\beta_{32} = 0.59$ ,  $t = 2.66$ ,  $p < .01$ ). This

finding was consistent with previous findings, which showed that trust was the important antecedent of brand loyalty as suggested by Morgan and Hunt (1994). Respondents demonstrated a high trust level and became brand loyal by forming a long-term relationship with the brand.

In summary, as Fournier (1998) mentioned, customers showed brand loyalty when they perceived positive brand personality, which was consistent with their beliefs. Also, findings indicated that the association between brand personality and behavioral brand loyalty was positively significant only when mediated by trust.

## **Discussion**

### **Theoretical and Practical Implications**

This study provided empirical evidence for the development of customers' repurchasing behaviors involving service quality, user imagery, perceived price, brand personality, and trust. The mediating effect of trust in the relationship between brand personality and brand loyalty was significant. Study findings confirmed Morgan and Hunt's model (1994), in which trust is shown to be an important antecedent of commitment and behavioral intentions toward the brand. Results supported the finding that the customer's perceptions of user imagery were consistent with the brand personality. Also, results indicated a positive relationship between perceived price and the specific dimension of the brand personality, competence. This study emphasizes the importance of identifying a specific brand personality dimension of the selected hotel brand and its association with the brand quality relationship.

Also, this study answered the question about the relationship among brand personality, trust, and brand loyalty as formulated by Fournier (1998). Positive brand personality increased trust level; hence, customers became brand loyal by indicating their willingness to maintain a long-term relationship with a hotel brand.

Findings have important marketing and general management implications. Hotel marketers should be able to assess how their target customers view their hotel and develop marketing strategies along a specific dimension. Since hotel services are characterized by intangibility, creating and maintaining a consistent brand personality with overall images of a prime target market is crucial. This is especially true for the upscale market segment, where customers purchase not only the products but also the symbols of luxury, pride, and status. For instance, if a customer perceives a hotel brand image as sophisticated, the effectiveness of the hotel's advertisement may be enhanced by featuring upper-class service attribute in a testimonial ad form and/or a glamorous outlook on its hotel buildings on its website.

In addition, advertising should be carefully developed based on the results of this research. If the target market indicates that their major personality is up-to-date, the hotel advertising manager should develop advertising that features a modernized layout that includes furnishings, colors, and logo. The implications of this study are not limited to advertising. The décor, architecture, and appearance of personnel issues are also applied to increase the degree of customer satisfaction by appealing to a consistent image for a target market.

### **Limitations and Suggestions for Future Study**

Several limitations are associated with the present study. First, the results may not be generalized to other segments of the lodging industry. Data from this study were collected from customers at a single upper-upscale hotel brand. The other types of hotel segments may have different levels of effects between brand personality and brand loyalty. In addition, the sample selection for this study was not purely random. As noted, pure random sampling is almost impossible in the lodging industry, so including many different types of hotel brands and segments would increase external validity. Thus, future studies should include multiple brands in the lodging industry to better represent the population as well as to identify different representative brand personality dimensions.

In this study, brand loyalty was measured only according to an attitudinal aspect. In other words, this study included only customers' behavioral intention to maintain the long-term relationship. As noted by Back and Parks (2003), brand loyalty should be measured by using both attitudinal and behavioral aspects. Failing to measure actual repurchasing behaviors may not reveal clear representations of true brand loyalty. Future studies should include assurance of the researcher's access to the industry and to information on actual purchasing frequencies for the hotel. Some database companies provide this type of service, but it is costly. Joint efforts between the industry and academia would enable results to be more parsimonious and increase the validity of the study.

In sum, this study suggests that significant antecedents and consequences are associated with brand personality. Developing careful marketing strategies involving advertising and pricing strategies, along with the specific brand personality of a hotel brand, may tend to increase customers' trust level. In turn, customers will increase their positive relationship with the hotel, resulting in brand loyalty. However, positive brand personality will not automatically increase the repeat purchasing rate; customers must first build a positive relationship with the brand. Hotel marketers should open active communication channels with the customers, identify their needs and wants, and respond to them accordingly. In addition, an understanding of the antecedents of brand personality and the brand personality-customer relationship not only aids in developing a brand and consumer segmentation strategy, but also provides a controllable link that the firm can exploit by manipulating the various marketing mix elements (Aaker, 1996; Fournier, 1994).

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## Assessing the Relationship of CEO Compensation and Company Financial Performance in the Restaurant Industry

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### Abstract

There is a perception that little relationship exists between company performance and CEO compensation. CEOs have personal goals that can conflict with the interests of shareholders. One approach to resolving this has been to align the incentives of executives with the interests of shareholders. This solution may affect how top executives behave, and the caliber of executives an organization attracts.

Using the Nations Restaurant News Stock Index, this study examined the correlation between company performance and CEO compensation in the restaurant industry. Results show that a positive correlation exists, although weak, between CEO compensation, gross revenue, net income and stock price.

Key Words: CEO Compensation, Shareholder Wealth, Stock Incentives

### Introduction

The relationship between executive compensation and corporate performance has been studied extensively, yet remains a controversial issue (Abowd, 1990; Duru & Iyengar, 1999; Gibbons & Murphy, 1990; Jensen & Murphy, 1990; Lambert & Larcker, 1987; Leonard, 1990). Among the more troubling issues are the magnitude of compensation and the (inappropriate) use of discretion/power to benefit oneself in a variety of ways including empire building and/or entrenchment (Bebchuk and Fried, 2003). Company performance has been defined using stockholders' equity, stock performance, sales growth, and profitability (e.g. earnings per share, return on investment, and total profits).

#### *Stock Performance*

A number of studies have not found a strong relationship between stockholders' equity, defined as return on common stock or changes in market value, and executive compensation (Murthy & Salter, 1975; Aupperle, Figler, & Lutz, 1991). Others, however, have reported a statistically significant relationship (Lewellen & Huntsman, 1970; Coughlan & Schmidt, 1985).

#### *Profitability*

Results of studies investigating the relationship between profitability and executive compensation have been ambiguous. Several investigations have provided evidence of a positive correlation between profitability and executive compensation (Carr, 1997; Cosh & Hughes, 1997; Finkelstein & Hambrick, 1989; Firth, Tam, & Tang, 1999; Mengistae & Xu, 2004; Riahi-Belkaoui, 1992). Other studies have found no statistical relationship between profitability and executive compensation (Aupperle, Figler, & Lutz, 1991; Fosberg, 1999; Murthy & Salter, 1975).

#### *Sales Growth*

Some studies have found no significant relationship between sales growth and compensation (Firth, Tam, and Tang, 1999; Carr, 1997). Others have found a positive correlation between executive compensation and sales growth (Gregg, Mankin, & Szymanski, 1993). Firms with greater growth and more complex operations may offer greater compensation to their CEOs (Core, Holthausen, and Larcker, 1999). Also, researchers have suggested that linking compensation to sales growth protects executives from changes in the stock price (Riahi-Belkaoui, 1992).

In hospitality related businesses, a positive relationship between managerial incentives from stock options and stock option repricing in the US casino industry was found (Rogers, 2005). In a study investigating the (potential) determinants of cash compensation for executives in the restaurant industry, CEOs of larger firms were found to receive higher compensation (Kim and Gu, 2005). This was consistent with earlier studies (Carr, 1997; Cooley, 1979; Core et al., 1999; McKnight, 1996; Riahi-Belkaoui, 1992).

This study assessed the relationship of CEO compensation and company performance in the restaurant industry. The specific goals of this research were to: (1) examine the relationship between CEO compensation, gross revenue, net income and stock price performance; and (2) determine the level of CEO compensation that had the strongest association with gross revenue, net income and stock price performance.

### Methodology

The data for this research were derived from three sources, and included the years 2000 through 2004. The sample was based upon the Nations Restaurant News Stock Index of 73 publicly-traded U.S. restaurant and other food service related companies ("NRN Companies"), as of March 4, 2005, downloaded from Nations Restaurant News web site. Using this web site, year end closing stock prices were collected. Second, data on CEO compensation (salary, bonus, restricted stock values, value of options and other compensation) for these NRN Companies was gathered from Edgar-Online database. This database contains the proxy statements, DEF 14A, as filed with the Securities and Exchange Commission. The third source was Mergent-online which is supported by Compusearch. This database provided gross revenue and net income in U.S. dollars. Statistical analyses were performed using SAS (release 8.02TS level 02m0) and Microsoft Windows XP 2000 Excel software.

### Results

Certain companies were removed from the sample because either they recently filed for protection under U.S. bankruptcy laws and certain public information was not available, or they issued stock under an initial public offering during the five year period being considered. As a result, complete data on CEO compensation, gross revenue, net income and stock price performance were available for 60, 62, 65, 66 and 66 companies for the years 2000, 2001, 2002, 2003 and 2004, respectively ("NRN Sample Companies"). Using gross revenue for each sample period, the data were divided into four equally-sized groups – separated by quartiles (Group 1 companies had the lowest gross revenue, and the 25% quartile separated it from Group 2, the next largest, etc.).

Table 1 Descriptive Statistics for NRN Sample Companies in 2004					
	Mean	25 <sup>th</sup> Quartile	Median	75 <sup>th</sup> Quartile	Standard Deviation
Gross Revenue (000)	\$ 1,150,836	\$ 117,503	\$ 337,866	\$ 924,666	\$ 2,683,093
Net Income (000)	77,767	1,115	9,657	50,908	293,547
Stock Price	20.52	7.29	14.97	32.01	15.48
CEO Compensation	1,545,930	414,344	786,784	1,175,513	2,333,831
Salary	520,651	269,432	469,880	653,353	303,276
Bonus	476,216	0	175,000	411,700	425,427
Restricted stock grants <sup>1</sup>	323,849	0	0	0	1,113,090
Option grants <sup>2</sup>	128,321	0	35,189	125,000	270,496
Other Compensation <sup>3</sup>	96,893	5,025	24,525	83,260	163,869
1. Restricted stock grants are the value of shares of common stock issued to executives that were not vested at the date of grant. 2. Option grants are rights issued to executives to purchase shares of stock, at a specified price, upon future vesting. Value based upon the Black-Scholes valuation method. 3. Other compensation includes such items as company paid health benefits, long-term incentive plans and the use of company property.					

In 2004 (the most recent year) the median gross revenue for the sample as a whole was \$337.9 million, and the median net income was \$9.7 million. Also, in 2004, the median CEO received \$786,784 in total compensation per year. Remuneration from base salary and bonus represented a substantial portion of their annual compensation. During the sample period average total CEO compensation increased 49%, base salary increased 18%, bonuses increased 32% and other compensation increased 59%.

### Stock Performance

Stock prices ranged from \$0.63 to \$83.00 during the five-year period; the median price for the NRN Sample Companies was \$13.00. On average stock prices increased 35%.

For this study there was a positive, relatively strong and significant relationship between CEO salary and stock price ( $r = .512$ ). When other forms of compensation were included, the relationship was not as compelling. Moreover, total compensation was not as strongly correlated to stock price as was just salary.

The strongest correlation between CEO salary and stock price was in companies with the highest gross revenues (group 4); the weakest was in Group 2. When salary and bonus were considered, the strength of the relationship was strongest in group 3; also, the correlation of these companies tended to be stronger and more consistent at all “levels” of CEO compensation.

Table 2 Correlation Coefficients Among CEO Compensation and Stock Price					
	Salary	Salary & Bonus	Salary, Bonus & Options	Salary, Bonus, Options & Restricted	Total
Group 1	0.252	0.168	0.140	0.139	0.089
Group 2	0.145	0.149	0.143	0.120	0.126
Group 3	0.320*	0.413*	0.337*	0.317*	0.346*
Group 4	0.385*	0.364*	0.306*	0.221*	0.299*
NRN Sample Companies	0.512*	0.383*	0.366*	0.324*	0.351*
*Significant at p = .05.					

During the five years included in the sample, stock prices increased 35.4% and CEO compensation increased 48.9%. This tendency was not the case for companies in Groups 1 and 3, however. For these companies stock prices increased but CEO compensation increased at a slower rate. This may indicate that increasing stock prices were caused by other market conditions, or that some of the companies were new to the public market. More troubling for shareholders of group 2 were the relatively large increase in CEO compensation (44.9%) and the 6.7% decrease in stock value.

#### *Profitability*

Group 3 had the strongest relationship between CEO compensation and Net Income when just base salary was considered. When bonus was considered, the connection was a little stronger in Groups 2 and 3. The weakest relationships were in Group 1.

Table 3 Correlation Coefficients Among CEO Compensation and Net Income					
	Salary	Salary & Bonus	Salary, Bonus & Options	Salary, Bonus, Options & Restricted	Total
Group 1	0.114	0.097	0.069	0.069	0.090
Group 2	0.412*	0.448*	0.442*	0.390*	0.370*
Group 3	0.490*	0.457*	0.380*	0.363*	0.408*
Group 4	0.316*	0.329*	0.313*	0.221*	0.233*
NRN Sample Companies	0.354*	0.310*	0.307*	0.278*	0.296*
*Significant at p = .05.					

During the five years of study net income increased 26.2% and CEO compensation increased 48.9%. In Groups 1 and 2, however, CEO compensation increased by 9.1 and 44.9% while net income decreased by 71.5% and 40.4% respectively; this might indicate that increasing CEO's compensation and benefits had a negative impact on reported net income.

#### *Gross Revenue*

During the five year period gross revenue increased 29% on average. When considering just the CEO base salary, the relationship was significant and strongest with gross revenue in Group 1. The weakest connection between CEO salary and gross revenue were companies in Groups 2 and 3. The correlation between total compensation and gross revenue was also strongest for Group 1 companies; it was weakest in Group 3. Also, the correlation was the strongest and the most consistent for Group 1. For this group gross revenue increased 17% during the five year period, and CEO compensation increased 9%. For group 3, however, there appeared to be little connection between compensation and gross revenue: Group 3 CEO compensation increased 39.1% while gross revenue increased 27.6% during the sample period. This suggests that increasing CEO compensation and benefits did not result in higher gross revenue.

Table 4  
Correlation Coefficients Among CEO Compensation and Gross Revenue

	Salary	Salary & Bonus	Salary, Bonus & Options	Salary, Bonus, Options & Restricted	Total
Group 1	0.556*	0.467*	0.512*	0.515*	0.462*
Group 2	0.045	0.109	0.092	0.151	0.153
Group 3	0.293*	0.200	0.154	0.134	0.137
Group 4	0.300*	0.313*	0.303*	0.234*	0.253*
NRN Sample Companies	0.423*	0.350*	0.353*	0.337*	0.363*

\*Significant at  $p = .05$ .

### Discussion and Conclusion

This study has a number of important implications about the incentives of CEOs and the direction of future research on CEO compensation. The results confirmed the findings of other studies relating to stock performance (Core, Holthausen, & Larcker, 1999; Joyce, 2001; Lambert & Larcker, 1987). This study had a positive correlation between stock price and total CEO compensation, with the strongest relationship at companies having revenue greater than \$924.7 million. This could be attributed to the size, diversity of the operations, experience of the CEO, age of the company and investor expectations of company performance.

Gross revenues had mixed results in other studies. Gregg, Mankin, & Szymanski (1993) reported a positive correlation between gross revenue and CEO compensation. In this study Group 1 had the strongest correlation, indicating the possible importance placed upon growth and market share for these companies, many of which are new to the public stock market.

Results from other studies have found no statistical relationship with total CEO compensation and total profit (Aupperle, Figler, & Lutz, 1991; Fosberg, 1999). In this study, a significant relationship, albeit weak, was found between net income and total CEO compensation. The relationship was stronger for companies in Group 3 when considering only salary and bonus remuneration. Despite the disproportionate increase in total CEO compensation during the sample period there was a positive correlation between stock price and net income indicating that CEO's have possibly impacted company performance enough to increase market capitalization and shareholder wealth.

These results suggest that pay for performance is a significant component of CEO compensation packages with base salary the smallest relative to the compensation generated from changes in the value of restricted stock and stock option holdings and bonus and long term incentive plan payments which are performance-based and established by company board of directors. A well structured compensation plan would reward top executives for results over which they assert control, while being protected from economic or industry wide problems. For example, CEOs compensation other than base salary should partially be tied to some measure that tracks a market or industry index and partially be determined based upon some internal criteria (such as operating cash flows).

One of the problems with current CEO compensation arrangements might be that the (generous) compensation provided to executives is linked only weakly to their performance. This pay-performance disconnect is troubling if CEO's are "incentivised" to enhance shareholder wealth. The results of this study confirm that a substantial part of compensation is weakly linked to managerial performance.

### Limitations and Future Research

The researchers chose the NRN stock index of restaurant companies as the sample population to study. This group of companies may not represent the general restaurant companies publicly available and therefore the results may not be generalizable. In addition, the analysis was limited. Given the importance of CEO compensation and company performance, future research projects could consider the following:

- The impact on stock price performance of non-equity deferred compensation plans that pay CEO's after retirement.
- The impact of separation payments on shareholder wealth.
- The benefit of "golden parachute" contractual severance contracts to shareholders.

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## When is an Ethical Situation 'Not a Question of Ethics'?

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### Abstract

This research concerns the perceptions and decisions of lodging sales and marketing executives in dealing with ethical marketing issues. Respondents were given ten vignettes, representing ethical dilemmas in the five categories of ethical behavior (coercion and control, personal integrity, physical environment, paternalism, and conflict of interest) identified by previous researchers. The findings suggest that sales and marketing executives do not consider the ethical element of a situation as they make decisions. All of the vignettes embodied ethical choices. Results indicate a need for lodging sales and marketing executives to develop and adhere to ethical guidelines for the unique situations they face.

Key Words: Ethics, Lodging Sales Managers, Ethical Theory

### Introduction

This research deals with ethical decisions of marketing / sales executives in the lodging industry. It focuses on their perceptions and action responses to 10 vignettes describing hospitality marketing situations. The ethical situations covered by the vignettes vary from those that are "slightly unethical" like advertising puffery to those that are blatantly unethical like knowingly deceiving, or over billing, consumers.

The methodology used differs from the bulk of the research into ethics in hospitality decisions using vignettes. It does not frame choices in terms of two diametrically opposite alternatives, ethical or unethical. Rather, the research investigates the likelihood that respondents perceive of their alternatives differently than past research has assumed (Damitio and Schmidgall, 1993; Stevens, 2001). It investigates whether respondents consider some of the ethical decisions researchers ask them to make, as "not a question of ethics." In this project, respondents are given three alternatives regarding their perceptions of situations: ethical (E), not ethical (NE), or not a question of ethics (NQE). Their action alternatives are: "yes" they would act, "no" they would not, or "maybe" they would.

### Literature Review

There is no universally accepted definition of ethics, or business ethics. Early ethical theorists developed normative approaches prescribing standards of behavior, and codes of conduct (Chonko, 1995). Lewis (1985) in his study of primary and secondary sources arrived at the following definition of business ethics: "*Business ethics is rules, standards, codes, or principles which provide guidelines for morally right behavior and truthfulness in specific situations.*" (Lewis, 1985, p.381). More recently, researchers have developed theories explaining how people behave in the face of ethical situations (Tsalikis and Fritzsche, 1989).

Ethical theorists fall into two schools of thought: teleological and deontological (Chonko, 1995). Teleological theorists hold that moral 'rightness' is based on consequences of behavior-- the ratio of good to bad behavior. The teleological context embodies three viewpoints: egoism, utilitarianism, and situational ethics. The egoist viewpoint focuses on the individual's long-term interests. Upchurch (1998) found egoism to be the predominant ethical foundation of bed and breakfast operators in making ethical decisions. The utilitarian viewpoint, in contrast, addresses the best interests of all concerned. Act utilitarianism deals with the actions of individuals applying the ratio of good to bad consequences to determine ethical behavior. Situational ethics by contrast, does not include standards or behavioral guides, to guide decision-making. Situational ethics are flexible and deem ethical actions to be dependent on particular situations. For example, the ethical situation of a manager ordered by a superior to commit an unethical act or be fired is different from the manager committing the same act on his own (Chonko, 1995).

Deontological ethical theory holds that other factors in addition to consequences should be considered, and that in some cases consequences should even be ignored (Tsalikis and Fritzsche, 1989). The theories of Categorical Imperative and the Golden Rule as guides to behavior are based on law or reciprocal treatment. Unfortunately, these theories do not address complex situations when there are multiple stakeholders, options or obligations. Given the above theoretical frame of

reference for ethical situations, it is useful to define ethical situations encountered in day to day lodging sales activities, operationally. Fritzsche and Becker (1983) developed five ethical issues categories for their study of the ethical behaviors of marketing managers. These categories include:

- Coercion and control: An external force coerces a manager to make a decision or behave in a certain manner through the use of threats, extortion, or other sources of power.
- Conflict of interest: Managers face situations having more than one interest, and if equally pursued, may result in injury to individuals or the organization.
- Physical environment: A special case of conflict of interest, in which the environment can affect an unethical decision.
- Paternalism: Managers must balance the 'needs of the many' with individual autonomy.
- Personal integrity: Relates to issues of conscience and deceptive advertising. (p.293)

In a widely cited work, Alexander and Becker (1978), suggest that vignettes encompassing ethical issues and decisions allow for more valid measures of respondent opinions. Vignettes offer more detail and limit assumptions on the part of respondents in framing their replies. Vignettes also standardize the stimulus across respondents, provide better data, and facilitate measurement of the influences on respondent opinions (Alexander and Becker, 1978).

Lodging businesses are involved in marketing both products and services. This enhances the opportunity for marketing personnel to behave unethically. The intangibility of service can make it difficult for buyers to establish objective purchase criteria. Research comparing the sales strategies of product and service sales people suggest that service sales people tend to emphasize personal and emotional appeals to close the sale which gives more latitude for unethical behavior (Rao and Singhapakdi, 1997). Product sales people on the other hand rely more on tangible evidence (Dubinsky, Ingram, & Rudelius; 1985). Rao and Singhapakdi (1997) concluded that to instill confidence and trust in consumers, services marketers required higher moral standards than product marketers.

Some of the research into ethics in the hospitality industry has focused on perceptions of future ethical issues: future ethical dilemmas and issues that future professionals will face (Schmidgall and Damito, 1991; Enhagen and Hott, 1992). Upchurch (1998) proposed an applied model for testing the ethical climate of hospitality organizations. Stevens (2001) compared the responses of human resource directors to those of hospitality students and found that concern for litigation compelled directors to rate ethical situations lower. Expanding on the literature using vignettes and ethical / not ethical responses, this study seeks to add to the greater understanding of ethical issues by examining the not a question of ethics response by managers when posed with a ethical dilemma.

### **Research Instrument and Methodology**

The research instrument developed for this study contains vignettes that present hospitality sales and marketing activities embodying ethical issues. Ten different hospitality sales and marketing vignettes were developed following the pattern used successfully by Damito and Schmidgall (1993) in investigating ethical issues of lodging managers. The vignettes deal with all five of the ethical categories identified by Fritzsche and Becker (1984), namely: personal integrity, conflict of interest, coercion and control, paternalism, and physical environment. The instrument includes such specific hospitality sales and marketing issues as: false, deceptive, and misleading advertising (scenarios 5 & 6), deliberate over charging (9), accepting gifts from suppliers in conflict with company policy (1), offering gifts as a form of bribery to gain business (2), participating in an informal price setting arrangement with competitors verging on illegality (4), knowingly selling an inferior product (8), sharing privileged competitive information (3), intentionally provide guests with wrong purchase advice to increase profits (10), and taking actions that might injure someone (7). A copy of the vignettes is presented in Exhibit 1.

#### **Exhibit One The Ethical Vignettes**

1. As the general manager of a hotel, one of your major suppliers asks for the keys to your car so that he can put a cardboard box into your trunk. You give him the keys. When you get home and open the trunk you find a case of fine French champagne. He did not offer you anything and you didn't knowingly receive a gift from him. The company policy on gifts is that employees cannot receive gifts valued at over \$25 dollars. If you were the general manager, what is the likelihood you would keep the gift? (*Coercion and Control*)

2. Your resort is bidding on a very profitable 5-year contract for the annual meetings of a large professional association. The association's director informs you that your major competitor has offered him and his family an all

expenses week-long trip at one of their properties in Hawaii. If you were the director of convention sales, what is the likelihood you would match the offer? (*Coercion and Control*)

3. Sam Smith recently accepted a senior sales manager position with the Regal hotel, coming from a hotel in the same market. Smith's former hotel is known to be the leader in the market. When Smith was hired, he believed his selection was based on his management potential. The morning beginning of the third week on the new job, Sam received the following memo from the General Manager: *Please meet with me tomorrow at 8:15 for the purpose of discussing the revenue management strategies of your former hotel, and how we might attract some of their clients to our hotel.* If you were Smith, what is the likelihood you would provide the General Manager with the information? (*Conflict of Interest*)

4. Janet Malo is Director of Marketing for the Robert's Cay Resort on Paradise Island. Janet's property recently joined a consortium of independent hotels on the island. Janet has the opportunity to book a large incentive meeting, but the incentive company wants a lower rate than the consortium is willing to give. Janet's property is willing to reduce the rate. If you were Janet, what is the likelihood you would book the business at the reduced rate? (*Conflict of Interest*)

5. To get customer attention, your assistant suggests advertising suites for the low rate of \$149 when even your smallest suites start at \$299. The suites being offered are really regular rooms that have sofas in them, are a little larger than most rooms, or have more luxurious appointments (amenities). What is the likelihood you would approve the advertising campaign? (*Personal Integrity*)

6. You are planning advertising that features rooms at a bargain rate of **\$179\*** in large bold letters. The asterisk refers to the very small print at the bottom of the advertisement indicating the conditions including bookings 4 weeks in advance with a minimum 5 day stay including a weekend, subject to availability, and travel on specified airlines. What is the likelihood you will follow through with advertising in this format? (*Personal Integrity*)

7. You have booked a large meeting (with a lot of repeat potential) with tremendous electrical power requirements. As the group is moving in, your chief engineer advises you that he will be unable to meet the power demands without running the risk of injuring one of his staff. What is the likelihood that you would direct him to continue with the power installation anyway? (*Paternalism*)

8. Your hotel is undergoing a rooms renovation in the north wing due to be completed by the end of May. It is Memorial Day weekend and the rooms have everything completed but carpeting and floor tile. What is the likelihood that you will sell those rooms anyway? (*Physical Environment*)

9. An error has been made when you checked a guest out of the room. A mini bar bill of \$14 was not included. You know that most guests don't check their bill very carefully. What are the chances that you would simply put the charge on the bill of the room's current occupant? (*Personal Integrity*)

10. Your food and beverage department has received a great buy on some Chilean Cabernets. They are O.K., but not nearly as good as some of the Australian and American Cabernets. The Director of Catering Sales has told you to push the Chilean Cabernets. A client planning an expensive dinner seeks your advice on choosing between the Chilean and Australian Cabernets. As a catering sales manager, what is the likelihood that you would push the Chilean Cabernets? (*Paternalism*)

The questionnaire asked respondents to react to each of the vignettes and the respective decision situations in two ways. First, the respondents were asked to indicate whether they considered the entire vignette to be ethical, unethical, or not a question of ethics. Having stated their perceptions of the vignette, respondents then indicated whether they would take the action described. They chose from: "yes, I would do this", "maybe, it depends", or "no I would not do this". The respondents were asked if their place of employment had a code of conduct.

A non-random list of sales and marketing executives was drawn from the membership list of over 7,000 members of the Hospitality Sales and Marketing Association International (HSMIAI). This list can be described as the sales and marketing executives within hotel companies in the United States. The typical titles of the individuals included in this list were Director of Marketing, Director of Sales, and Sales Manager. Questionnaires were mailed to this list, a total of 1,080 lodging sales and marketing executives from the United States. A total of 220 usable surveys were received, a response rate of 20.4%.

## Results and Discussion

### Demographics

The respondents included Directors of Sales and Marketing (35%), Director of Sales (13%), and Sales Managers (39%). The remaining 13% were from regional and corporate sales and marketing executives. The size of hotels represented ranged from those with less than 100 rooms to over 500 rooms. The majority (63%) of hotels represented were between 100 and 400 rooms in size.

The number of years that respondents worked in a marketing/sales position in the lodging industry varied from a single year to 35 years. Additional demographic information reveals (1) 64% of the sales/marketing executives are female; (2) the range of ages of respondents varied from 24 to 72 with a median response of 43; and (3) marital status of respondents were 61% married, 24% single, 14% divorced and 1% widowed. The highest educational level ranged from 6% with a high school diploma to 8% with some college but no degree to 23% having earned an Associates degree, 57% with a Bachelors degree and the remaining 6% with Masters degrees.

### Ethicality of the Vignette

For ease of comparison, Table 1 presents the responses to each of the ten vignettes. The 220 questionnaires yielded a total of 2,083 responses to the question of whether a situation was ethical (E), not ethical (NE), or not a question of ethics (NQE). Since every vignette incorporated unethical dimensions, NE was expected to account for the overwhelming number and proportion of responses. While it did comprise the largest number and proportion of responses, 840 or 40.3%, nevertheless, NQE included almost as many. This raises interesting and puzzling questions. For example, if respondents perceive of unethically-charged hospitality marketing situations as not a question of ethics, then what do they perceive the situations to be? Why do they perceive of them differently than researchers do?

Table 1  
Respondent Perceptions by Vignette

Vignette		Ethical (E)	Not Ethical (NE)	Not a Question of Ethics (NQE)	Total
1	#	31	156	23	210
	%	14.8	74.2	11.0	100
2	#	40	86	76	202
	%	19.8	42.6	37.6	100
3	#	78	64	68	210
	%	37.1	30.5	32.4	100
4	#	50	53	104	207
	%	24.2	25.6	50.2	100
5	#	37	117	58	212
	%	17.5	55.1	27.4	100
6	#	86	15	111	212
	%	40.6	7.1	52.3	100
7	#	22	71	113	206
	%	10.7	34.5	54.8	100
8	#	16	59	133	208
	%	7.7	28.4	63.9	100
9	#	28	173	9	210
	%	13.3	82.4	4.3	100
10	#	33	46	127	206
	%	16.0	22.3	61.7	100
TOTAL		421	840	822	2083

There were 822 NQE responses, or 39.5% of the total responses, a surprisingly large number. NQE responses were received for every vignette, ranging from 11% to 63.9%. And regardless of the unethical components of each vignette, 421 responses, 20.2%, still considered all of the situations to be ethical. Many respondents deemed decision situations involving unethical dimensions as not a question of ethics at all. The data indicate that NQE respondents comprise a surprisingly large and important sector. Regardless of the fact that every vignette incorporated unethical dimensions, in 5 of the 10, NQE responses account for over 50% of the total for that vignette. Altogether for the study, they account for almost 75 percent of the 822 NQE responses— 588, or 71.5%. Respondents do not seem to perceive of their alternatives in the dichotomous ethical / unethical choices

offered by past researchers. Rather, many perceive of a third alternative where situations are not a question of ethics at all. Vignette #1 had the lowest proportion of NQE responses, 11%, (accepting a gift contrary to policy) while vignette #8 had the highest, total, almost 75%, (knowingly selling an unfinished room.). Eight of the 10 vignettes had NQE responses of more than 27%.

#### *Action based on Ethicality*

The actions of NQE respondents differ significantly from those of E and NE respondents. When the respondents who are most likely to act (the yes and maybe groups) are considered, they account for more than 67% of all responses in three of the vignettes. Regardless of their ethical perceptions (E, NE, or NQE), respondents will not act when injury to an employee may be involved (vignette 7). Nor are most of the NQE respondents inclined to act when flagrant unethical issues are involved, such as deliberate over billing (vignette 9) or selling unfinished rooms (vignette 8). However, NQE respondents do not seem hesitant to undertake misleading advertising or give consumers false information (vignettes 5 and 6). For other than the most flagrant violations of ethics respondents seem to be willing to "do what it takes" to meet competition.

Focusing on the NQE respondents and their actions, even when these respondents do not consider situations to be a question of ethics, and apparently are not concerned with ethical issues still the largest number and proportion, 313 or 38.1%, chose not to act. Two hundred seventy four respondents, 33.3%, indicated that maybe they would act, while just 244, 29.7%, replied that yes they definitely would act. However, NQE respondents had the largest number of "yes" action responses by far. They accounted for 244, or 50% of the 485 "yeses." This compares with 215, 51% for the E respondents and just 26 or 3% of the NE group. As for the actions chosen by NQE respondents across the ten vignettes, the results do not reveal any clear pattern. What stands out is that 88.5% of NQE responses to vignette 7 indicated that they would not act to harm an employee, while almost 66% indicated that they would reduce prices to get business regardless of any agreements with other companies (vignette 4).

The NQE respondents also accounted for a considerably larger number and proportion of "maybe" responses, than did either the NE and E respondents. NQE respondents seem to be more undecided, or at least more willing to postpone making a decision, than either of the other groups. The 274 "maybe" NQE responses, 33% of the NQE total, are over 3 times the number of "maybe" replies of either E or NE respondents. There are 80 "maybe" E respondents, 19%, and 91 NE "maybes" or 11%.

When respondents are faced with decisions involving unethical aspects that seem to benefit them, or at least do not penalize them, and consider them as NQE, it seems that they would then take the illicit action. Yet, almost 40% of them reported that "no" they still would not act. Why this is so remains puzzling and our data does not reveal any patterns or logical explanations.

As was noted above, the two highest proportions referred to decisions that were clearly unethical-- injury to an employee (vignette 7) and selling an unfinished room (vignette 8). However, NQE respondents would act in cases like providing customers with misleading information, deceptive advertising, or breaking a price agreement to get business, which might well be illegal per se.

#### *Not a Question of Ethics Response*

To facilitate comparisons between those who definitely would not act and all the rest in the five vignettes where NQE is the majority response, the action responses were grouped into two categories: "no" indicating that the respondents would definitely not take the proscribed action and the "not no" category comprising both the "yes" and "maybe" responses. Then, the two groups are subdivided according to respondent perceptions of situations as E, NE, and NQE.

Given the unethical dimensions built into each of the vignettes, we might logically expect the overwhelming majority of the respondents to answer "no" they would not act. More than half of the 2083 responses, 1162, or 56%, indicated that they would not take the proscribed action. However, a substantial number, 930 respondents, about 45%, were in the "not no" category. Thus, a very large group appears inclined to act, regardless of unethical dimensions. Ethical considerations do not seem to be a barrier to actions for many lodging marketing executives.

The majority of the "no" responses, 723 or 62.7%, are respondents who perceived of situations as not ethical. Understandably, they would not be expected to act. However, the "no" respondents also include 439 respondents, 38%, who although they consider the situation to be E or NQE, still chose not to act for. Although it is not a matter of ethical concerns, their reasoning is not clear. Moreover, even 11% of the respondents who considered the situation to be ethical, and 27% who said that it was not a question of ethics, stated that, nevertheless, they still would not act. Our data did not shed any light on the reasons for their action choices.

Table 2 NQE Responses by Vignette	
Vignette / # of responses	Action by # / %
Vignette 4 / 207	No 41 / 19.8% Not No 166 / 80.2%
Vignette 6 / 212	No 64 / 30.2% Not No 148 / 69.8%
Vignette 7 / 206	No 182/ 88.3% Not No 24/ 11.7%
Vignette 8 / 208	No 153/ 73.6% Not No 55/ 26.5%
Vignette 10 / 206	No 84/ 40.8% Not No 122/ 59.3%

### Conclusions and Areas for Future Research

The results of this study indicate three conclusions. First, the surprisingly large number of respondents who consider unethical situations to be NQE suggests the need for meaningful company and professional ethical guidelines such as codes of behavior. Hospitality employees have revealed a lack of emphasis on the topic of ethics by their superiors (Stevens, 1999). Second, based on the first conclusion, there is a need to reward ethical behavior mandated by the organization, and to penalize unethical actions. Codes of conduct or ethics can be viewed simply as 'window dressing' unless emphasized by upper management (Gordon & Miyake, 2001). Third, the overall responses suggest that sales and marketing managers behave according to teleological theory, behavior based on consequences. While Upchurch (1998) found the long-term effect of a decision in an ethical dilemma to have an influence for bed and breakfast operators (who are also most likely the owners of the establishment), the same cannot be said for the marketing managers in this study.

Our analysis and discussion of NQE respondents and their actions have resulted in the following conjectures shared as propositions that may be explored by future research:

- NQE respondents may realize full well that their decisions are at least somewhat unethical, but since the proscribed actions may benefit them or their company, they may rationalize that the situations are actually NQE.
- NQE respondents may be more concerned with decision criteria other than ethics like meeting sales and revenue goals, or beating competition,
- NQE respondents may be using what they believe are normally accepted company or industry practices, the "real or operating ethic," as contrasted to the declared "public relations ethic."
- NQE respondents may simply hesitate to make ethical judgments, especially for hypothetical decision situations, and thus declare situations not a question of ethics.
- NQE respondents may be highly competitive, willing to do whatever it takes to win.
- NQE respondents as groups may be the least ethical of all lodging marketing/sales executives.
- NQE respondents may be very indecisive managers.
- NQE respondents simply perceive of decision situations differently than others do and honestly feel that they are not dealing ethical issues at all.

This survey has some limitations. This research was exploratory in nature; no ethics studies have been conducted with hospitality marketing managers previously. Respondents were not asked for a personal definition of ethics, which could help to explain their responses. While the survey was based on previous scenario methodologies and industry input, it is not likely that the breadth of ethical situations faced by marketing managers has been addressed. Given the respondents are members of the professional organization HSMAI, these results may not be indicative of the entire industry. A response rate of 20 percent compounds the aforementioned issues.

While this research merely raises but does not answer such questions, it does suggest fruitful areas for future research. Do managers have a scale of unethical situations in mind where some things are knowingly unethical but acceptable to take action and others are definitely not? For example, if NQE respondents do not perceive of unethical decision situations as questions of ethics, why do they hesitate to take action? If ethical behavior does not guide their decisions, what does? Are action-

oriented respondents who perceive of situations as unethical more likely to consider them as not a question of ethics at all? Is an NQE response to decisions that are widely recognized as unethical simply a way of easing consciences, of rationalizing? Do NQE respondents simply perceive of ethically charged situations differently than most others? Are NQE respondents just more inclined to act without any regard for ethical/unethical concerns?

Offering a choice of 'not a question of ethics' comprised a significant number and proportion of the responses. Given the built in unethical aspects of the vignette situations an overwhelming number of NE responses were expected. Surprisingly, almost as many NQE replies as NE replies were received. As this is the first research study to offer an alternative response to the traditional ethical / not ethical determination in hospitality ethics research, this study opens more avenues into the functional area most likely to face ethical dilemmas.

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## Longitudinal Analysis of Online Travel Purchase Behavior: 2000 to 2004

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### Abstract

Not much is known about the evolutionary behavior of generational cohorts when it comes to online travel purchase behavior. The purpose of this study was to examine the changes in online travel purchase behavior among generational cohorts between early 2000 and late 2004. While significant increases in travel purchase behavior were found between the two time periods as a whole, baby boomers reported greatest aggregate increases in the likelihood of travel purchase behavior compared to Generation Xers and the Seniors segment. The study used a synthesis of literature across the areas of technology adoption theory, e-commerce and sociology. Theoretical and practical implications are discussed.

Key Words: Online Travel Purchase Behavior, Cohort Analysis and E-commerce, Baby Boomers

### Introduction

The Travel Industry Association of America (TIA) states that nearly 64 million people used the Internet for online travel planning in 2005. This milestone is the result of a combination of factors namely Internet adoption or the diffusion of innovation, broadband penetration, and maturing Internet technologies (such as security, multimedia etc) (Beldona, 2005). However, an underpinning of this phenomenon of growth is the underlying behavior of generational cohorts who show different points of adoption in the timeline (Beldona 2005). A generational cohort is generally defined as a group of individuals who have shared similar experiences and have unique common characteristics around these experiences. In this context, Beldona (2005) found that older baby boomer cohorts reported greater increases in the likelihood of travel information search behavior over Generation Xers at large. While this study (Beldona, 2005) was restricted to search behavior the period (1995-2000) of the study in question was formative given that Internet penetration was just 59% in 2000. Additionally, broadband penetration was merely at 5%.

The purpose of this study was to evaluate the changes in online travel purchase behavior between 2000 and 2004 across generational cohorts. Insights into the evolution of online travel purchase behavior specific to generational cohorts have theoretical and practical implications.

### Review of Literature

The period between 2000 and 2004 reflects an important period of change in the online travel commerce. In the year 2000, Internet penetration was at 59 % of the US adult population, broadband penetration was at a low of 5% (DiCarlo 2005) and transactional capabilities of travel websites were in the early stages of maturity. Transactional security technologies such as Secure Socket SSL had been introduced around then and travel websites were simpler in layout and design. While Internet penetration at the end of 2004 was around 66%, broadband penetration stood at around 50% (DiCarlo 2005). By 2004, since the online travel portals had become more sophisticated in their interactional capabilities and product/service offerings, technology had expanded the Web's capacity to accommodate and stimulate the growing demands of customers. It is not surprising that the share of dial-up users in the internet population is declined by 2004.

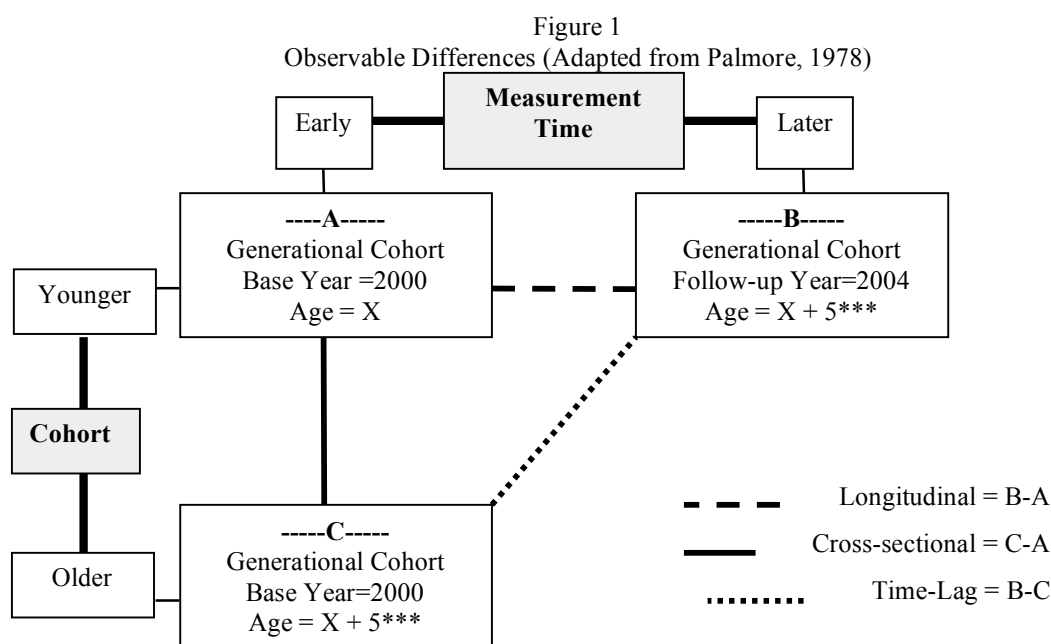
### Technology Adoption

Studies have found significant association between demographics and attitudinal factors in the adoption of new technologies (Shimp & Beardon, 1982; Rogers, 1995). Kolodisnky, Hogarth & Shue (2000) categorized electronic banking technology users as technophiles, in-betweens, and technophobes; technophiles were younger, had higher incomes and education, and were mostly single. In the same vein, formative studies on Internet usage profiles suggest the importance of demographic factors such as education, race, and occupation as significant predictors of Web usage (Pitkow & Kehoe 1996; Furr & Bonn & Susskind, 1998).



However, cultural and social contexts are key characteristics of consumer behavior. When applied to generational cohorts, these contexts (cultural and social) tend to be more pronounced. People who have a similar set of experiences specific to a particular era may have similar traits and consumption patterns. For example, baby boomers are considered to have unique and flamboyant spending habits, especially when it comes to travel (Whelan, 1997, Nautilus Report 2002). Reference groups also influence consumer behavior because particular behavioral norms permeate across groups of people (Bearden and Etzel, 1982).

## Methodology



Cohort analysis is used as a powerful statistical tool to assess differences in cohort behavior between two periods (i.e. 2000 and 2004) when two sets of data represent similar populations and have identical questions over two separate periods. Figure 1 illustrates an adaptation of the three levels of analysis pertinent to cohort analysis, namely cross-sectional, longitudinal, and time-lag (Palmore, 1978). In Figure 1, measurement time is on the horizontal axis and cohort is on the vertical axis. The horizontal line (B-A) reflects a longitudinal difference; those between early and later measurements on the same cohort. The longitudinal difference indicates that change has occurred either due to change in age from one period to another (called the *age effect*), or simply a *period effect* that indicates change in the environment between the two time periods (2000 and 2004). Age effects are changes caused by the natural aging process or any changes pertinent to the age characteristics of that cohort. A period effect reflects a change caused by the environment, such as the penetration of high speed internet connections in this case.

On the other hand, cross-sectional differences indicate the presence of age or cohort effects. In this study, it could be either 2000 or 2004 that can be evaluated separately, and the difference is along the vertical line between the boxes A and C (C-A). A cohort effect implies change due to behavior as a result of the inherent characteristics built around the experiences of the cohorts. For example, baby boomers (1942-1960) are distinctly different in behaviors and lifestyles, when compared with Generation Xers (1961-1981). Time-lag differences reflect change between the older cohort (B) at the older measurement (2000) and the younger cohort (C) at the later measurement (2004). From Figure 1, the time-lag difference is between B and C (B-C). From time lag differences, one can infer the possibility of period or cohort effects while no age effect exists.

ANOVA is the common statistical technique employed in cohort analysis where adjusted means are tabulated and differences ascertained using Multiple Classification Analysis (Palmore, 1978). However, the dependent variable in this study was dichotomous, indicating whether respondents bought travel services (1 = Yes and 0 = No). Therefore, chi-square tests of association were administered to exact statistical significance between the chosen cohorts with frequencies providing directional signs of an increase/decrease.

## Data

Data from two surveys in 2000 and 2004 respectively were used for the study. Both surveys were conducted by the Pew Research Center. While the 2000 survey was conducted in the month of March, the 2004 survey was conducted in the last week of November. The difference between the two periods of data collection is four years and nine months which is nearly five years. Both surveys were administered by telephone, and samples for both surveys were randomly drawn from telephone exchanges across the continental United States. The procedure ensures wider representation of a population compared to that taken only based on a published telephone directory. Details of the sampling procedure are available at <http://www.pewinternet.org>.

For the 2000 survey (Wave 1), the original number of cases was 2238, and 914 for the 2004 (Wave 2) survey. Both waves included weight variables derived from a demographic weighting procedure using parameters from the Current Population Survey that adjusts the distribution of all demographic weighting parameters including race and gender. Since the number of cases in Wave 1 was much more than that of Wave 2, the number of cases in Wave 1 was reduced (using a random draw procedure in SPSS 13.0) to 1640 (after weighting) to bring a level of parity in numbers between the two waves. The reduced sample of Wave 1 was checked for distributional inconsistencies with the original sample and none was found.

## Results

Table 1  
Percentage of Travel Purchase Behavior across Cohorts 2000 - 2004

Birth Cohort	2000			2004			2000-2004 % Cohort Change	Cohort to Total Change Ratio
	Age of Cohort	n	% of Yes to Purchase	Age of Cohort	N	% of Yes to Purchase		
1983-1987	NA	NA	NA	18-22	50	48.1	NA	
1978-1982	18-22	38	42.7	23-27	57	66.3	23.6	1.12
1973-1977	23-27	29	38.2	28-32	77	68.8	30.6	1.46
1968-1972	28-32	34	40.5	33-37	51	65.4	24.9	1.19
1963-1967	33-37	51	54.3	38-42	82	62.1	7.8	0.37
1958-1962	38-42	48	43.6	43-47	66	62.9	19.3	0.92
1953-1957	43-47	22	25	48-52	82	74.5	49.5	2.36
1948-1952	48-52	14	29.8	53-57	62	60.2	30.4	1.45
1943-1947	53-57	13	27.1	58-62	30	62.5	35.4	1.68
1938-1942	58-62	14	41.2	63-67	23	57.5	16.3	0.78
1933-1937	63-67	5	27.8	68-72	5	35.7	7.9	0.38
1928-1932	68-72	15	40.5	>=73	7	25.9	-14.6	-0.69
<=1927	>=73	4	19					
		287	35.81			57.49	21.01	

Across the key demographic parameters, both samples (2000 and 2004) had near to equal distributions. Table 1 was constructed around the principle of Multiple Classification Analysis (Palmore, 1978), except that percentages were used instead of means. The table provides a snapshot of change in online travel purchase behavior across all cohorts. Ostensibly, there are significant increases between the two time periods across most cohorts with the exception of cohorts born between 1963-1967 and 1933-1937. The last column on the right provides absolute change which is a relative parameter of change compared to all other cohorts. From this column, one will note that the highest change ratios are in the boomer birth cohorts of 1953-1957 (2.36), 1943-1947 (1.68) and 1948-1952 (1.45). The youngest Gen X cohort of 1973-1977 also reports an absolute change ratio of 1.46.

Table 2 illustrates a cross-sequential design of the three effects (cross-sectional, longitudinal, and time-lag). Drawing from Figure 1, cross-sectional differences are calculated using differences (C-A) in frequencies between the immediate older cohort (C) and the younger cohort (A) within one wave. An examination of the cross-sectional differences indicates the absence of any distinctive pattern.

Table 2  
Observed Differences for the Cross-Sequential Design

Birth Cohort	Year 2000	Year 2004	Cross- Sectional 2000	Longitudinal	Time-Lag
1978-1982	42.7	66.3	-4.50	23.60**	28.10***
1973-1977	38.2	68.8	2.30	30.60***	28.30***
1968-1972	40.5	65.4	13.80	24.90**	11.10
1963-1967	54.3	62.1	-10.70	7.80	18.50***
1958-1962	43.6	62.9	-18.60**	19.30**	37.90**
1953-1957	25.0	74.5	4.80	49.50***	44.70***
1948-1952	29.8	60.2	-2.70	30.40***	33.10***
1943-1947	27.1	62.5	14.10	35.40***	21.30
1938-1942	41.2	57.5	-13.40	16.30	29.70
1933-1937	27.8	35.7	12.70	7.90	-4.80
1928-1932	40.5	25.9	-21.50	-14.60	6.90
<=1927	19.0				

\* $p \leq 0.05$ , \*\* $p \leq 0.01$ , \*\*\* $p \leq 0.001$

Longitudinal differences evaluate how the same people (or the same birth cohort) behaved after a period of time. All values in bold were found to be statistically significant reflecting longitudinal differences (B-A from Figure 1) between the two time periods. With the exception of the 1963-1967 cohort and the senior cohorts, all birth cohorts reported longitudinal differences. In the case of the 1953-1957 cohort, frequencies in 2004 (74) nearly tripled from 2000 (25). Evaluating time-lag differences involves studying individuals of the same age across two time periods. From Table 2, with the exception of the 1968-1972 cohort and the senior cohorts, time-lag differences are prevailing in all other cohorts. Relatively speaking, the strongest time-lag differences are in the 1953-1957 cohort and the 1958-1962 cohorts.

### Discussion and Implications

Given that both longitudinal and time-lag differences were prominent in the analysis, there is strong evidence of a period effect. However, this was expected because of the significant growth of online commerce between the two time periods. Factors that can be attributed to the period effect are growth in Internet penetration at large, broadband penetration, more reliable security technologies as well as intuitive travel websites with superior value offerings from what was originally offered in 2000. For example, innovative bundled vacations, lowest rate guarantees, and finer features like providing exact distances from hotel to attractions are value offerings that drew customers more towards buying travel. In addition to the period effect, one will note that the strong time-lag differences and the increases in purchase behavior among younger boomers indicate the presence of a cohort effect as well. With the exception of the youngest boomer (1958-1962), there were sizeable increases in online travel purchase behavior amongst the relatively younger boomer cohorts. In fact, the 1953-1957 cohort reported the highest percentage (74%) of online travel buyers compared to all other cohorts in 2004.

There are social reasons too for the boomer cohorts to have reported significant increases. With grown up children who are either at the point of leaving home for college, these boomers have more time and disposable income for the propensity to travel. Especially given the larger spending habits and passion for travel that baby boomers have always demonstrated (Whelan, 1999). In summary, the aggregate longitudinal change (33.65%) in baby boomer cohorts was much higher than aggregate changes pertinent to Gen Xers (21.10) and Seniors (3.20). Also, boomers reported greater aggregate time-lag change (34.25) compared to Gen Xers (28.30) and Seniors (10.60).

From a technology adoption standpoint, there are similarities and differences between the findings of Beldona (2005) and this study. For example, Beldona's (2005) study found that older boomers were more likely to seek travel information 2005 as opposed to younger boomers. In this study, while most boomer reported increases in online travel purchase behavior, the highest increases were in the middle to younger boomer cohorts with the exception of the youngest cohort in this category. As such, younger boomers might be the real laggards when it comes to technology adoption. In addition to this, the family lifecycle could also be at play because of family commitments at the younger stage where the propensity is to save money for retirement. Travel marketers need to take this into consideration and provide more tailored services in the online and offline channels to induce boomers to buy online. This is all the more relevant when it comes to complex travel products such as cruises and vacations which are projected to be the next frontier of online travel sales. Also, the use of Internet by younger cohorts to buy travel online suggests the need for targeted marketing efforts towards these groups.

Generation Xer cohorts also show increases, although these are relatively *less prominent* compared to that shown by Baby Boomers. Further investigation using a continuous or ordinal dependent variable will provide greater variability to better capture this effect. In summary, the results of this study confirm that there is a strong period effect between 2000 and 2004 as well as a moderate cohort effect. Clearly, baby boomers reported the largest aggregate increases in online travel purchase behavior between 2000 and 2004 compared to Gen Xers and the Seniors segment.

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## Corporate Strategy of Multinational Hotel Corporations

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### Abstract

Top executives from four major multinational lodging corporations were interviewed on corporate strategies to identify key strategic drivers for creating value in the global lodging industry. The findings include shifts in current business models, strategies for changing brand architecture, searches for profitable new markets, commoditization and differentiation of the product, and development of customer-centered functional strategies.

Key Words: Hotel, Strategy

### Introduction

The U.S. lodging industry has seen its share of ups and downs over the first half of the decade. In the early 2000's, the industry was challenged by levels of environmental uncertainty that were unprecedented in its history. Post-9/11 travel fears, the SARS epidemic, and war in Iraq, combined with an already sagging economy, resulted in across-the-board decreases in operating statistics for lodging properties which had not been seen in decades. However, the industry has proven itself to be resilient. In 2005, the lodging industry not only survived but prospered, even after the economic and geopolitical shocks resulting from high gas prices, health alerts, tremendous natural disasters, and several terrorism bombings in global travel markets and destinations. PricewaterhouseCooper forecasted an 8.1 percent REVPAR growth in 2005, and virtually every other performance measure is expected to increase at a faster rate than last year (McInerney, 2005).

The environmental issues mentioned above represent just some of the myriad of threats and opportunities that leading lodging corporations must address in order to achieve their goal of becoming, over the long term, a global leader in market position and profitability. These firms seek to expand and grow their businesses internationally by attracting new and profitable customers, leveraging internal and external business relationships, managing supply chains for greater cost efficiencies, generating revenues and margins through demand-supply elasticity driven pricing, and controlling costs without sacrificing service through operational and workforce management. In the face of current shocks and threats, such firms must make new strategic choices that affect how they satisfy these key business objectives. For example, in order to sustain current and future cash flows firms must carefully consider the mix of customers to target internationally, the portfolio of services to offer, and the geographic markets in which to compete. Simultaneously, they must evaluate consolidation, diversification and crisis management.

The emphasis on corporate strategy as a research theme reflects the importance of these issues. No studies of global industry changes and corporate strategies have been conducted of diversified U.S.-based multinational hospitality firms. This research will identify and analyze the strategic drivers underlying domestic and international success of diversified U.S.-based multinational hospitality firms.

### Methodology

Multinational lodging companies with leading and broadly diversified brands were targeted for inclusion in this study. The research was funded by a grant from the Alfred P. Sloan Foundation Industry Center for Travel and Tourism. The four multinational lodging firms that participated in the study will not be identified in this paper in order to ensure the anonymity of those interviewed. The companies will be referred to as lodging corporation A, B, C, and/or D, throughout the study.

A blend of quantitative and qualitative approaches was used for this study. Both secondary (industry studies and corporate records) and primary (interviews of key executives) data were collected. Executives from 4 multinational hotel corporations responsible for corporate strategy and business development were interviewed by the researchers using a

structured, one-on-one format, with 4-8 executives participating per firm. Interview data were analyzed using a constant comparative method to generate grounded theory (Glaser and Strauss, 1967). Interviews were conducted on a company-by-company basis (e.g., all interviews were conducted at one company before moving on to the next company). This ensured that each subsequent set of company interviews would incorporate the relevant issues from the previous data analysis. Thus, as grounded theory methodology prescribes, data collection and analysis remained an interrelated process.

Executives from each company answered questions about corporate strategy: models of diversification and risk management being utilized, key strategic drivers currently being deployed, factors shaping strategy in the global hospitality industry and strategic responses to those factors, internal changes (i.e., structure, systems, processes) required to transition their strategies, benchmarking of other industries, and impact of these changes on firm profitability. Interviews lasted 45 to 75 minutes.

After each set of company interviews, transcripts were made from digital audio recordings. The transcripts from each set of interviews were then verified against the recordings, read, and re-read for coding. The coding process identified themes or categories that describe strategic drivers underlying success or failure. Comparisons between interview sets were made after all interviews were completely coded, and the categories were written up into descriptive text (Wolcott, 1994).

#### *Profiles of the Lodging Corporations Interviewed*

Lodging corporation A is a publicly held multinational corporation with reported annual sales for 2004 of \$2.8 billion. It franchises over 6396 hotels in approximately 40 countries worldwide. Lodging Corporation A has strategic business units in travel product (hotels timeshare product and timeshare exchange), travel distribution, rental car, and real estate.

Lodging corporation B is a privately held multinational hotel corporation with reported annual sales for 2003 of 3.6 billion. It operates or franchises over 455 hotels in approximately 43 countries worldwide.

Lodging corporation C is a publicly held multinational corporation with reported annual sales for 2004 of \$3.6 billion. It operates or franchises over 500 hotels in approximately 20 countries worldwide.

Lodging corporation D is a publicly held multinational corporation with reported annual sales for 2004 of \$10 billion. It operates or franchises over 2,676 hotels in approximately 65 countries worldwide. Lodging corporation D has strategic business units in hotels, and timeshare.

#### **Findings**

Several issues emerged surrounding corporate strategy: (a) shift in ownership model of the hotel industry; (b) changes in brand architecture: consolidation, loyalty programs, concentration, diversification, and downscoping; (c) search for profit pools such as international expansion and niche markets; (d) commoditization of the product and the need for differentiation; and (e) functional strategies such as the use of information technology, customer relationship marketing, and human resources.

#### *Shift in Ownership Model*

One of the dominant strategies presented by the executives throughout the interviews was the changing ownership model of the hotel industry. Throughout the past 20 years the hotel industry has evolved from one of a hotel asset management model to a contract and fee based management model (Adams, 2005). Hotel asset ownership and its associated risk have shifted from the major lodging corporations to individual owners or smaller ownership companies, with the major lodging corporations retaining management contracts or franchising agreements (Nykiel, 2005).

While all of the lodging corporations indicated an increased move away from the corporate asset ownership model towards the individual owner/operator franchise or management contract model, the rate and extent of the change in ownership model varied between the corporations. Lodging corporation A had experienced rapid expansion in recent years through the franchise ownership model, while lodging corporation B had its very first foray into franchising only within the past year as a result of an acquisition. Lodging corporation C was divesting itself of ownership of all but its flagship properties. And lodging corporation D had in recent years directed all of the asset ownership into a separate holding company or corporation. All four of the lodging corporations were aggressively pursuing a reduction of invested capital in hotel assets or hotel ownership. Many of the executives interviewed also pointed out similar changes in ownership models in some of their competitors who were not included in this phase of the study. Thus it appears that the changing ownership model is prevalent throughout the hotel industry.

The differences in ownership and capital models also creates a difference in strategy as those corporations with high concentrations in fee based business, have additional stakeholders in the individual owner/operator of the hotel. For these corporations, bringing increased value to the franchisees is a major corporate strategy. Several executives indicated new initiatives in creating brand loyalty with not just the consumer, but the owners and franchisors as well.

The change in ownership model has allowed for more rapid expansion as well as increased risk management. The franchising model has permitted higher growth rates and increased market share with lower levels of corporate capital investment. Franchising has also eased expansion into some international markets. Franchising has also provided the benefit of increased risk management. During times of market fluctuation, corporations holding hotel assets experience increased variances in their financial performance and risk, than do those corporations which are primarily management companies.

The changing ownership model is changing the vary nature of several of the corporations interviewed. Corporations that began and grew as asset management companies find themselves no longer in the real estate business, but in the business of brand management. This evolving ownership model will change the structural, and economic models of these corporations in the years ahead.

#### *Brand Portfolio/Brand Architecture*

##### Consolidation

The lodging industry has experienced a period of consolidation with numerous mergers and acquisitions in recent years (Harrison and Enz, 2005; Nykiel, 2005; Canina, 2001 and Olsen, M.D., Tse, E.C., and West, 1998). This was also true of the corporations interviewed. All of the lodging corporations had been active and/or were still in the active stages of completing mergers and acquisitions of other lodging corporations, to diversify their product portfolio. Several executives projected continued consolidation of the market, resulting in “three or four or five hotel companies left” with little to no small players remaining.

Consolidation brings concerns of synergy and fit in both systems and people. For those corporations which had experienced significant mergers or acquisitions in recent years, seamless technology or the ability to implement technology standards across the brand is a significant challenge.

##### Organizational Fit/Synergy

Successful mergers and acquisitions rely on synergies and organizational fit (Harrison and Enz, 2005). All of the lodging corporations indicated recent struggles with organizational fit as a result of mergers and acquisitions. In some cases the very culture of their corporation had undergone or was undergoing significant transformation. For several of the corporations, the acquisitions or mergers initiated the changes from a hotel asset company towards the fee based business model. Some of the corporations were still addressing obstacles to organizational synergy such as the consolidation of geographically disparate corporate offices. Yet in all, the synergy seemed on the surface to be complete with the executives from each corporation all playing on the same team.

Organizational fit and high performance cultures can be difficult to achieve in large organizations (Harrison and Enz, 2005; and Olsen et al., 1998). However for lodging corporation D company culture, or the system of shared values, was viewed as one of their strongest competitive advantages. Creating and maintaining the culture was prominent throughout their strategies.

##### Product at every price point

All of the corporations interviewed indicated a desire or need to have product available to the consumer at every purchase point and price. The following comments were made by interviewees illustrating this point: “[It is important to] have enough different products that are unique and/or enough different price points and different geographical distribution so you can provide hotels to people based upon their reasons for travel.” “Those companies that will do well are those that can serve customers who have different reasons for staying based on the occasion of travel.” “A portfolio that runs from the economy sector all the way to the upscale is real value added as consumers evolve and their interests evolve.” Brands are being combined and phased out in order to create a clear product line which is diversified and spread out over the value chain. The expansion and diversification of the brand portfolios was a pervasive strategy throughout all of the interviews conducted.

The executives indicated several rationales for this strategy. The main thrust or purpose of this strategy is to capture more of the market and to create loyalty in the customer. There is a desire to have a traveler stay in their own hotel

product regardless of the purpose or price of travel. But several executives also indicated this diversification has an additional benefit of risk management. As one executive explained: during periods of economic fluctuation the ability of the consumer to “trade up and down between price points is key.” A final strategy professed by one executive is that the increase in brands allows more market penetration. There are often non-compete clauses in hotel development, prohibiting the development of another hotel in a certain geographic market. However, those prohibitions generally do not extend to the development of other brands within the same corporation. The differing products and markets for the brands do not primarily compete against one another allowing for a higher market penetration in a geographic region.

#### Power of the brand

Some executives expressed that the very nature of the lodging industry is changing as a result of all the consolidation. They all indicated an increasing “power of the brand,” as a result of acquisitions and industry consolidation. The change in product distribution model brought about by the Internet has made the power of the brand even more important (Harrison and Enz, 2005). While the lodging corporations were divided on brand recognition or association of the brand name with the product, they each indicated an increased value to the consumer and to their franchisees by having brand association. Yet from there, branding strategies are different across the corporations, with some homogeneous, and some concentrating on differentiation.

#### Loyalty Programs

Consolidation has also contributed towards a change in corporate structure concerning loyalty, reward or frequent guest programs. Likewise, as the corporations are expanding up and down the value chain, they are looking to keep the same customers with them throughout the value chain. The goal now is to have consumers look at a hotel chain as a continuous series of differing products which can meet all their varying needs; thus the increased importance of the loyalty programs.

These guest programs are no longer viewed as a discrete entity by the corporations or the consumer. According to an executive from lodging corporation C, Reward programs are “now an integral part of the industry – a core brand attribute”. The need for a consolidated brand reward program is now so strong that for one corporation consolidating the rewards program across their differentiated brands was the first declaration to the consumer that hotels were owned by one parent corporation. For each of the corporations interviewed management or oversight of the loyalty program is considered a core function with representation in top executive management structures.

#### Concentration and Diversification

While the hotel and lodging industry has pursued many forms and levels of diversification in the past two decades, recent years have seen a move towards concentration. Lodging corporation A recently announced plans to spin off into four different companies with lodging as its own company.

The hotel organizations had pursued very little if any recent unrelated diversification. Only company D had engaged in unrelated diversification in the past few years and they indicated that the move was strictly for tax purposes. Overall, the corporations had recently divested or were making plans to divest themselves of non-hotel or lodging related businesses, with lodging corporation A indicating a desire to become a “pure hotel company.”

The same has not been true of related diversification. All four of the lodging corporations have been expanding the timeshare lodging product, with some more aggressively than others.

#### Vertical Integration in the Distribution Channel

Several of the lodging corporations were seeking vertical integration through developments in the e-distribution process. Internet or e-distribution has significantly altered the distribution of hotel and lodging product in the past five years. Several of the executives attributed successful performance of their corporation to their success in this evolving distribution method: “Our distribution systems are clearly a competitive advantage.” The lodging corporations are seeking to realize the advantages of this method of distribution in different manners with some choosing to own existing e-distribution product and some making rapid changes in the development of their own e-distribution channel(s). One of the corporations indicated their reason for involvement in the distribution channel was for business intelligence or a better understanding of e-distribution that the involvement of ownership would require. “I can make decisions with more information than my competitors.” This corporation predicts that in the future their competitors “will have to have more of a stake in the travel industry [e-distribution].”



### Downscoping

In addition to the selling of non-core businesses, the corporations indicated other forms of downscoping. Several of the corporations have undergone a recent “purging of underperforming [hotel] properties,” and others were selling their hotel property assets, converting towards a fee based business away from the hotel asset model.

### *Search for Profit Pools*

### International Expansion and Globalization

The opportunities presented by changing global demographics and the saturated U.S. domestic upscale market have encouraged international expansion (Harrison and Enz, 2005; Nykiel, 2005; and Yu, 2005). All of the corporations indicated they were actively pursuing international development and expansion.

The primary focus of this expansion for the near future is Asia, with China receiving the most aggressive concentration. One executive from lodging corporation B said, “I think that everyone at this point has some form of Asian Strategy.” The increase in wealth and population of China combined with the “proliferation of growth in roadways and the loosening of travel restrictions” all point towards considerable increase in travel to and within China. Most of the corporations indicated some interest in development of product in India as well. However they indicated very strongly that China was the main thrust of their current international expansion plans.

Beyond the Asian region, plans for international development vary with some lodging corporations actively pursuing resort development in the Middle East, some contemplating mid-tier development in South America and others seeking acquisition of international product. They all indicated however, that growth if any in Europe would be product or brand conversion.

The combination of the changing ownership models and the phenomena of the world growing smaller present some opportunities for international ownership in hotels in the United States. An executive from corporation D explained, successful owners in other parts of the world are no longer just looking for growth opportunities nationally, but they are seeking “the best opportunities on a worldwide basis.”

### Restructuring for Global Expansion

Two of the four lodging corporations had experienced recent corporate re-structuring or integration to encourage and accommodate the shift towards a global market, with a third corporation indicating a need to be “more global in their focus.” Corporation C recently acquired the international counterpart to its brand allowing it to aggressively expand its international portfolio (DeFoe, J. and Credeur, M.J., 2005, December). For some of the corporations this restructuring has included changes in organizational structure, and redistribution of management geographically. All of the lodging corporations have shown other indications of a move towards a more integrated global corporate structure with the consolidation of reservations systems, e-distribution, logos, and/or loyalty programs.

### Niche Markets

The U.S. domestic upscale lodging market has reached a point of maturity and saturation such that growth is primarily through entrance into other markets (Silverman & Weilheimer, 2003). The lodging corporations were engaged in development and construction of new product within their existing brand structures, development of new brands for emerging and untapped markets and in brand conversions and acquisition of product. All of the corporations anticipated continued growth through ongoing development of new brands and products.

For lodging corporations B and C, which had previously had a portfolio weighted heavily towards an upscale product, the saturation of this market within the United States has shifted their growth strategies towards aggressive development of their own mid-tier product or through the acquisition of product in the mid-tier lodging sector. The executives of all four lodging corporations indicated that there had been “Limited opportunities to grow domestically without acquisition.”

However, not all of the expansion is projected towards the mid tier markets. Each of the corporations indicated they are developing or seeking product at various points in the price and product scale for other smaller target markets that are currently underserved. Pervasive throughout the interviews were statements that the corporations were each seeking to own product at every price point and reason for which a guest may have to travel. All of the lodging corporations predicted a continuing expansion of the brand portfolio in all types of [lodging] product, and across all the price points through both growth and acquisition.

### Commoditization

The Internet has significantly changed the distribution of lodging product in the past five years. All of the corporations indicated a belief that the distribution channel for the lodging product has been more affected by the Internet than for any other industry, market or product. An executive from lodging corporation A declared, "Internet distribution has restructured the travel industry. It has changed the entire industry and will continue to do so."

Internet distribution has encouraged commoditization of lodging product, with consumers having extensive knowledge of prices and products, heretofore known only to the lodging corporations and reservation systems. The corporate executives expressed concerns of a movement towards a commoditized lodging product.

A commoditized marketplace brings concerns on several levels. Lodging corporation C's executive acknowledged, "Brand commoditization directly undercuts rate premiums and customer loyalty." Thus the concerns are that e-distribution will encourage consumers to purchase based on price, and not brand attributes, and that consumers will not remain loyal to the brand but will "jump ship" for lower prices. To combat these concerns the lodging corporations are actively pursuing various differentiation strategies to capture brand loyalty and rate premiums.

### *Functional Strategies*

#### Technology

Technology is predicted to affect the lodging industry in many ways (Nykiel, 2005). Discussion of forward moving technology and the Internet was rampant throughout the interview process with many models and predictions towards new products, processes and formats.

The resulting technological competencies that have come as a result of Internet technology are changing the very nature of the lodging industry beyond the distribution model. Hotel operations and physical product are expected to undergo rapid transformation in the coming years as the result of technology. One of lodging corporation B's executives projected, "Product initiatives domestically and internationally are going to change the way we do business." The interviews captured predictions of changes ranging from energy efficiency, to in-room entertainment, to communications systems to business solutions. The product from the room lock to the lobby structure is predicted to change as technology continues to expand. The simple core competencies of wireless communications and voice over IP are allowing the lodging industry to make sweeping changes in operations and staffing logistics.

Changes in seamless connectivity, pervasive or adaptive computing, self-service functionalities or technology enabled convenience, and the rapidly developing handhelds in the hotel business and with the individual consumer will change the basic operations of guest check in, billing, and many other parts of the guest stay. Keeping abreast of consumer technology is a strategic thrust for all of the hotel corporations interviewed.

Within the guestroom itself, there have been many recent initiatives to upgrade and evolve the product. Publicly advertised initiatives have disclosed upgrades in bedding, in room entertainment, and business connectivity. An executive from corporation D explained: "Guests expect to have the same things in their home that they have in their hotel." All of the corporations indicated a move towards "high choice, high quality entertainment" embedded throughout the hotel product and systems.

These changes bring new financing questions. The lodging corporations are addressing issues from changing models of capital replacement reserves to product differentiation decisions. One executive predicted a forthcoming concern as economy brands seek to encompass the technological and amenity creep demanded by consumers while maintaining the economy pricing model. "Keeping the rate low, but offering the appropriate amenities" will be a challenge.

#### Marketing

Technology has also been the catalyst for significant changes in marketing strategy. The lodging industry as a whole has been lagging in moving towards one to one marketing and utilizing existing data to develop marketing programs more tailored to the individual consumer. However each of the corporations indicated key strategies emphasizing customer centricity and for leveraging and enhancing the distribution models of both the lodging product and the fee based businesses. All of the lodging corporations indicated increased efforts and strategies towards capturing, and utilizing data about guests, their preferences, inclinations, patterns, etc... to better serve the guest and to increase profitability.

Loyalty or frequent guest programs have become an integral part of the corporate strategy for the lodging corporations. Lodging corporations C and D have expanded their executive teams to include this functional area, with

lodging corporations A and B indicating significant strategy shift to embrace the importance of the loyalty programs as an integral part of their strategies.

### Human Resources

Increasing growth of the lodging market, reduced labor pools, and shifting economies have created staffing concerns for many hotels (Harrison and Enz, 2005; Nykiel, 2005). "Finding the right people" at all levels from housekeepers to management, is becoming increasingly difficult. Some lodging executives indicated a shift in human resource efforts as a result of the inability to hire sufficient "spectacular employees." Instead they find themselves engaged in "making the ordinary employee spectacular."

Human resources affect the hotel industry more significantly than many other industries. "The hotel industry is a labor intensive business, the ability to hire correctly, to train, and to limit the amount of turnover you have is important," an executive from corporation D explained. In fact corporation D estimates is has over 100,000 people comprising their workforce. The sheer numbers alone make the management of human resources an important part of their corporate strategy.

A more recent concern in human resource management is the threat of increased unionization in the hotel labor market. As an executive from corporation D projected: "Unions would like to have more presence in the hospitality industry and that would have huge implications for our profitability." Indeed, a shift towards increased unionization of the labor force would impact many aspects of human resource management.

Improving technological advances are aiding in human resource management. One corporation indicated it has experienced tremendous benefits in putting their manuals online. While another corporation is exploring Voice over Internet Protocol to outsource some labor to more accessible labor pools. However, they were quick to point out that most of the hotel corporations' value systems will not encourage the off-shoring trend in labor that has been pervasive in other industries. Yet as the world flattens will this remain true?

The discussion of human resources and corporate strategy would not be complete without the inclusion of the value of corporate culture. For one of the corporations interviewed, corporate culture was perhaps the greatest perceived difference between their own corporation's strategies and those of their competitors. Each executive in this corporation interwove a discussion of the strength of the corporate culture with their answers. This pervasive corporate culture for corporation D has benefited the company in decreased turnover of management and hourly employees, and increased synergy and productivity directly attributed to the lower levels of turnover. The executives for this corporation felt the culture was so pervading that it encompassed customer loyalty as well. They expressed the belief that guests remain loyal to their brand as a result of the company culture. Strategic research shows that the advantage provided to a corporation through exceptional corporate culture provides a more sustainable competitive advantage than tangible advantages of technology or product (Harrison and Enz, 2005). One executive from corporation D confided: "You can replicate the amenities and the distribution, but the culture that we have here you cannot replicate and that gives me a level of comfort."

### **Significance of the Findings**

The changes in corporate strategy discussed in this paper will have dramatic impact on the lodging industry. For example the changing owner operator model pervades strategic changes in technology, and human resources. Convincing a franchise owner to purchase new technology for the good of the brand versus their own short term profit becomes an additional hurdle in technology strategy implementation. Likewise the move towards an owner/operator franchise or management contract model has affected human resource practices. Front line employees greeting and serving the guest are now more likely to be employees of the individual owner and not the lodging corporation. This brings new challenges in getting an employee who is no longer an employee of the brand, but an employee of the owner/operator to buy into the brand concept.

Similarly the changes in ownership structure are changing the strategic environment between corporations. One executive indicated that it is not unusual to have an owner or franchisee own or franchise in all of the corporations. He projected that these owners "get all of the corporate strategies and consolidate them, , and not only can they play you against each other, but they can mitigate your differentiation by telling Marriott what Hilton is going to do in ten years."

Changes in brand architecture have resulted and most corporations have product at every price point. This proliferation of brands has caused confusion to the consumer in differentiating products between and within lodging corporations (Olsen, et al, 1998). The need for differentiation within the brands and the lodging corporation is essential.

International expansion is resulting in the globalization of the brand, the product and the lodging corporation. Changes in corporate structure to encompass this strategic shift have just begun (Harrison and Enz, 2005). As more lodging product is developed or acquired internationally, there will be a need for more corporate presence in these locations. Furthermore, the concept of the “American Hotel” product will change incorporating elements of the many cultures. Menu offerings, design elements, operational processes will all be affected as the corporations become more global. The increasingly global market has made competitive strategies even more important (Harrison and Enz, 2005).

Changes in technology and its accompanying strategies will continue to drive many changes in the lodging industry from guest room amenities to processes for accommodating and serving guests. Technology will affect human resources, capital finance models, product distribution methods, marketing, and day to day management practices at a minimum (Harrison and Enz, 2005). One executive told us we could not begin to perceive or imagine the technology environment of the future, and indeed this is true. Improvements in technology will continue to improve the distribution, operations and profitability of a global lodging market.

### Future Research

The constraints of this study only allowed for data collection from approximately half of the major multinational lodging corporations. Including more companies in all scopes of the industry would further validate the data and may provide additional findings.

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## Who They Really Are – Identify the Typology of Internet Shoppers Cautiously

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### Abstract

Many IT-related topics are being studied for hospitality and tourism management including understanding Internet shoppers. However, it is time to re-identify who they really are in a more rigorous way to increase the validity of the findings. This study suggested a framework comprising several complementary statistical techniques for cross validation to enhance the known techniques and improve segment-based approach. The study adopted such a framework and achieved a valid typology consists of four types of Internet shoppers for e-commerce management and development and for future research.

Key Words: IT, typology, e-commerce, classification, segment-based, Internet

### Introduction and Objectives

Internet technology is known as one of the greatest innovations to the economy simply because it changes the way people do business. The hospitality and tourism industry has been receptive to the benefits offered by such an innovation but it also faces a growing challenge brought by savvy Internet shoppers who quickly adapt to the usage of this technology for information gathering and price comparison in order to reach a better business deal. Information is the element ties travel business and information technology (IT) together seamlessly. As Internet technology, a kind of IT, expedites the way product or price information flows, many travelers are using it to gather information for travel planning. According to the Travel Industry Association's (TIA) report, as of 2003 there were 64 million adults in the US gone online for travel information. Using Internet technology not only is a convenient way for travel planning (Bhatnagar & Ghose, 2004; Suskind, Mark, & Bonn, 2003) but also is a major means for potential travelers to seek bargains and better deals.

These consumers shop online and are termed *Internet shoppers* in the study. As noted by many researchers, these shoppers are getting good and savvy at utilizing Internet technology to make purchases, reservations, or travel plans online. These savvy Internet shoppers must be cautiously classified as a typology for IT implementation and e-commerce development, and the typology should be classified in a more rigorous manner. The study proposed a framework that comprises several complementary statistical techniques to enhance the known classification methods and improve segment-based approach in order to identify the types of Internet shoppers accurately.

### Background and Literature

Despite the fact the Internet-enabled business has spurred growth and prosperity in the global economy, its growth and development can be generally reflected by online shoppers and online retail sales. For example, according to Forrester Research Inc. (August 2004), the growing population of online shopping households combined with retailer innovations will drive online retail sales to account for 12% of total retail sales in 2010. For the travel-related online sales alone, TIA reported that as of 2003, 42.2 million travelers were "online travel bookers," who have actually made travel purchases online, and 29% of them made all of their travel plans online. In addition, leisure travelers accounted for 59% of the travelers' budgets for the travel plans made online (Harteveldt, Leaver, & Yuen, 2004). Forrester Research also predicted (September 2004) that all segments of the hospitality and tourism industry will produce 34% of revenues on e-commerce in 2009 and yield a projected \$40.1 billion for the industry. These contemporary phenomena suggest a significant potential for Internet business development and for research. In recognizing the inevitable forces driving change of Internet technology, researchers have shown favorable interests on five topics: (1) The transformation of business model from the traditional one into an e-business model (Heung, 2003; Pernsteiner, 2000); (2) The impact resulting from the changes in the distribution network (Bhatnagar & Ghose, 2004; Suskind, et al., 2003; Hahn & Stout, 2000); (3) The analysis of Internet buyers' demographic information and usage of online shopping systems (Chang, Madanoglu, & Chu, 2003; Chu, 2001); (4) The impact on revenue (Fox, 2004; Carroll & Sigauw, 2003; Olearchik, 2003); and (5) The relationship between trustworthiness, time, and online reservations (Chang, Belanger, Uysal, 2005).

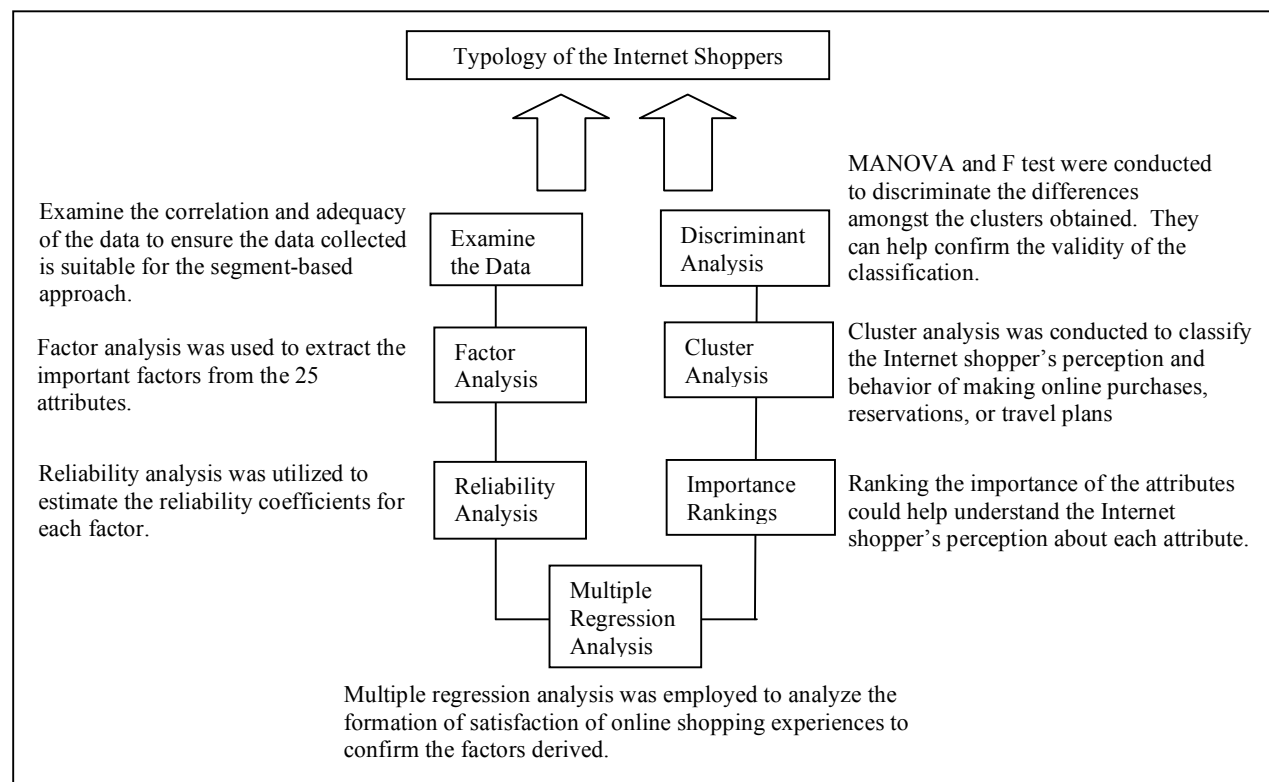
These research efforts serve as an important stepping stone for both academia and industry. Scholars evidently agree that the Internet acts as a viable alternative to traditional marketing intermediaries for business development. However these research works do not seem to address the classification of Internet shoppers carefully. The savvy Internet shoppers do not respond to Internet technology in the same way because they have different views about technology innovation and thus are using it for different purposes. Therefore, classifying Internet shoppers in order to understand them better is necessary. Chang et al. (2003) made a first attempt on this issue and found four types of Internet shoppers for the field of hospitality and tourism but they are not satisfied with the results as the research was exploratory in nature.

Therefore, without derailing from the spirit of classification method, this research proposes a framework to improve the segment-based approach. A series of statistical techniques complementary of each other on every step for cross validation are suggested in the framework, simply for the purpose of increasing the validity of the classification method.

### A Framework to Improve the Segment-Based Approach

The most common classification method used by researchers is factor analysis. However, factor analysis only investigates the intercorrelations between the respondents and does not measure the similarity between respondents. Therefore, cluster analysis is another technique often used to improve the result of factor analysis. Most prior studies completed the classification analysis when factor or/and cluster analyses are conducted. However, in order to increase the validity of the segment-based approach, the study proposed a framework (Figure 1). This framework comprises a series of steps of utilizing several *known* statistical techniques to ensure that the statistical results once found in each step can be cross validated and is good enough for the next step of analysis. The descriptions of the purpose of conducting the respective statistical technique are briefly stated by the side of the technique in the figure. Please note: the framework does *not* suggest the “flow” of employing these techniques as it is at the researcher’s discretion to freely use these techniques according to the research objectives set forth. However, the “steps” of implementing this framework are “suggested” in the paper implicitly as the details of how each technique is followed, conducted, and complemented are discussed.

Figure 1  
A Framework to Improve Segment-Based Approach to Identify Typology



### Methodology and Results

A questionnaire was developed via group interviews in which open-ended questions were utilized to obtain the elements that were believed to be influential on respondents' willingness to make reservations, purchases, or travel plans online. A total of 22 interviews were held with individuals who have had either made at least ten travel plans or purchased/reserved at least ten hospitality- or tourism-related products or services online in the past five years. The interviewees had various occupations in a university community across different age groups. Twenty-five attributes were extracted through these interviews. Some of these items were actually supported by the literature. In order to comply with the limitation on the number of pages for the paper, these attributes cannot be tabulated with detailed discussions. Please refer to Table 1 for these attributes. These attributes were actually included in the second part of the final instrument to test an Internet shopper's overall satisfaction on making online reservations, purchases, or travel plans.

The first part was designed to understand the respondents' Internet experiences and the last part of the survey contained general demographic questions. Summated rating (Likert Scale; 1 to 5) and semantic differential scales (1 to 7)

were used and the respondents' online experiences were controlled: only those who had made reservations, purchases, or travel plans from the hospitality and tourism industry on the Internet at least once in the past one year were selected. The survey pretest was conducted on a sample of 50 people on the campus but only 44 completed questionnaires were returned. Coefficient alphas ranged from .39 to .96 at a significance level of at least .05 (some.01). A total of 457 questionnaires were finally distributed person-to-person to "real travelers" at three international airports: Los Angeles, Miami, and Dulles (in Washington D.C.). These airports were selected because of the limitation of resources but the author believes that their traffics are large enough to justify the research objectives. 347 surveys were usable resulting in a response rate of 76%. Data were collected over approximately ten months last year.

The correlation of variables showed that 214 out of the 300 correlations were greater than .30. The adequacy tests for the overall and each variable were conducted and satisfied (MSA= .802). Also, the value of the test statistic for sphericity is significant at a significance level of .0001 and the KMOMSA showed that the data was meritorious. In addition, the values in the Anti-image Matrices were reasonably small indicating that variables were likely to share the common factors. These tests suggested that the data is suitable for using the segment-based approach for the study.

#### *Factor Analysis*

Factor analysis is one of the most well-known multivariate techniques of classical multivariate analysis (Jackson, 1991). Exploratory factor analysis was conducted first to analyze the underlying structure of the data matrix. The eigenvalues were all clearly above the latent root criterion and precluded their inclusion. The twenty-five attributes were reduced to seven orthogonal factor dimensions with 59.88% of the overall variance explained. The communality of each variable was relatively high (from .27 to .86), indicating that the variance of the original values was fairly captured by these factors. In addition, the high correlation suggests that items are unique to each factor. Table 1 lists the attributes under each factor together with the factor score after the orthogonal rotation, the eigenvalue and the reliability measure were computed using Cronbach's Alpha. Therefore, as presented in the table, five of the seven factors can be considered as internally reliable ( $\alpha > .70$ ; Hair, Anderson, Tatham, & Black, 1998). The factors were labeled based on the characteristics of their composite variables with higher loadings and with consideration of the responses to reflect the qualitative dimensions of this technique (Hair et al., 1998) as shown in Table 1.

#### *Multiple Regression Analysis*

A multiple regression analysis was conducted in sequence to explain the variance accounted for by each factor. Stepwise procedure was employed to help identify the most influential factors: Tangible (Factor 4), Reliable (Factor 2), Appealing (Factor 1), Trustworthy (Factor 3), Economic (Factor 6), Accessible (Factor 5), and Bonus (Factor 7). The scores on the overall satisfaction of making online reservations, purchases, or travel plans were regressed on the factor scores in order to understand the relative importance of independent variables that determine an Internet shopper's satisfaction level. All factors emerged as significant (sig.  $t < .05$ ) variables in the model. The  $R^2$  ranged from 16 percent of the bonus factors to 61 percent of the tangible factors. Overall, the regression model can explain the 56% of variance regarding how the seven factors project a respondent's overall satisfaction level on making online reservations, purchases, or travel plans. It also suggested that Internet shoppers' decision-making might be based on business fundamentals.

#### *Importance Rankings*

In the survey, respondents were also asked to list the five most and least important attributes from the 25 attributes. This step was conducted for the purpose of re-assuring the respondent's evaluation and re-confirming the regression result. Only 297 responses were usable for this task. The frequency for each variable was calculated as a weighted sum with rank 1 being equal to 5, rank 2 being equal to 4, etc. The top five items ranked as the most important in order are: "Reputation of the Internet vender," "Introduction of the Internet vender," "Policy of online transactions," "Quality of products or services offered," and "Security for online credit card payment." The five least important ones in order are: "Supporting information for travel," "Ease to find the location of the web site," "Must have lower price," "Page loading speed of the web site", and "Customization to suit buyers' needs." Based on the factor to which they belong, it can be seen whether or not the result of the multiple regression analysis earlier is good enough. For example, most of the top five attributes located in "tangibility" (Factor 4), followed by "reliability" (Factor 2) whereas the bottom four attributes were found in "bonus" (Factor 7) and "accessibility" (Factor 5). This result confirmed and validated the results found in the regression model previously.

#### *Cluster Analysis*

The next step to enhance classification is to conduct cluster analysis using all information obtained in the previous analyses to achieve a typology of Internet shoppers. A non-hierarchical cluster approach was adopted first. In addition, the data were also examined to exclude the outliers and thirty-two observations were deleted so as to make cluster analysis safe

Table 1  
Exploratory Factors Analysis with VARIMAX Rotation

Factor Name	Loadings	Mean <sup>a</sup>	Communality <sup>b</sup>	Eigenvalues	Variance (%)	Reliability
<b>Factor 1. Appeal</b> (the design must be appealing)				10.31	23.33	0.86
Convenience	0.89	3.60	0.63			
Flexibility	0.83	3.56	0.62			
Interface	0.67	4.12	0.59			
Content clarity	0.63	3.40	0.56			
Internet speed	0.59	3.61	0.27			
<b>Factor 2. Reliability</b> (the system must be reliable)				5.62	17.87	0.84
Accuracy	0.83	4.51	0.79			
Quality	0.80	4.38	0.69			
Assurance	0.65	4.42	0.63			
Variety	0.58	4.03	0.57			
<b>Factor 3. Trust</b> (the system must be trustworthy)				4.54	11.87	0.81
Privacy	0.83	4.25	0.77			
Security	0.79	4.56	0.83			
Record	0.80	3.94	0.66			
Phone No.	0.67	4.15	0.57			
Address	0.52	4.27	0.49			
<b>Factor 4. Tangibility</b> (the vendors must be tangible)				1.75	8.66	0.76
Reputation	0.77	4.12	0.86			
Introduction	0.71	3.44	0.74			
Policy	0.66	3.65	0.63			
<b>Factor 5. Accessibility</b> (the system must be accessible)				1.53	6.27	0.67
Page loading	0.71	3.12	0.59			
Ease to find	0.64	3.30	0.53			
Ease to operate	0.48	3.98	0.49			
Feedback/complain	0.29	3.77	0.55			
<b>Factor 6. Price</b> (the deals must be economic)				1.46	6.11	0.91
Lower price	0.82	3.86	0.69			
Better package	0.78	3.77	0.65			
<b>Factor 7. Bonus</b> (it is a plus to have additional features)				1.27	5.87	0.56
Supporting info.	0.69	3.25	0.47			
Customization	0.60	3.86	0.39			

a. Likert Scale from 1 (strongly disagree) to 5 (strongly agree)

b. Extraction value; the initial value is 1

for the data set. Next, a hierarchical technique was utilized on a randomly selected sub-sample to obtain a preliminary idea about the number of clusters. The visual inspection on the horizontal icicle dendrogram and the algorithm schedule suggested that a three- or four-cluster solution might be appropriate. Subsequently, K-mean cluster analysis was conducted on each suggested solution. The four-cluster solution was finally selected because it provided the greatest difference between clusters and yielded the most interpretable results. Each cluster was labeled in accordance with the characteristics of its composites shown in mean scores and four clusters were found (Table 2).

### Discriminant Analysis

The last statistical analysis suggested in the framework is to ensure that the validity of the classification obtained in cluster analysis is accurate enough. Therefore, a multivariate analysis of variance (MANOVA) is conducted to see if the clusters are being classified truly. Satisfaction level on making online purchases, reservations, and travel plans was used as the dependant variable to test the differences across the four clusters found previously. The equality of group covariance matrices returned a satisfactory result for conducting this technique (Box's  $M = 2104.67$ ,  $F = 1.56$ ,  $p = .000$ ). Wilk's lambda was .05 at a significance level of .00 indicating the significant differences amongst clusters. Overall, the classification results showed that the discriminant analysis model could correctly classify 85% of the individuals into groups. Therefore, the typology of Internet shoppers finally obtained under the guideline of the framework proposed and of a series of efforts on cross validation is expected to have a good validity.



Table 2  
Cluster Mean Scores

	Appeal (Factor 1)	Reliability (Factor 2)	Trust (Factor 3)	Tangibility (Factor 4)	Accessibility (Factor 5)	Price (Factor 6)	Bonus (Factor 7)
Sensate Shopper (Cluster 1; N=88)	4.52	1.46	2.85	1.57	2.82	1.85	2.95
Deal Shopper (Cluster 2; N=72)	1.83	3.02	3.03	1.96	1.58	3.87	.79
Defensive Shopper (Cluster 3; N=49)	1.27	3.65	4.36	2.61	2.72	.83	1.21
Totemic Shopper (Cluster 4; N=106)	2.13	1.81	3.64	3.96	1.76	.98	3.05
Total Mean (N= 315)	2.49	2.77	3.34	2.72	2.14	1.79	2.23
ANOVA	F = 4.03 p < .003	F = 54.03 p < .000	F = 34.93 p < .000	F = 9.08 p < .000	F = 3.32 p < .000	F = 38.31 p < .000	F = 24.03 p < .000

Mean score: 1=strongly disagree; 5=strongly agree

### Concluding Comments

This study proposes a framework and demonstrates how to use such a framework to identify the typology of the Internet shoppers for e-commerce development. It is important to know that, *first*, the proposed framework does not derail from the backbone of the segment-based approach; instead, it improves the approach. *Secondly*, the typology of the Internet shoppers can be found in a more rigorous way under the guideline of the framework. It includes four types of shoppers derived from seven factors and is sustained by other statistical tests. The cross validation methods suggested in the framework and the fact data was collected from the real travelers in the international airports have improved the validity of the results. *Finally*, the study suggests that many Internet shoppers buying the hospitality and tourism products or services online are very sentimental and practical. In sum, because the framework methodically includes several follow-up procedures to ensure the findings from the previous analysis are good enough for the next step, the accuracy and validity of the classification is increased and the typology discovered in the study should be ready for further implementation.

### Limitations and Future Study

There are some limitations on the research. The selection of the interviewees for the attributes could have been carried out with frequently travel individuals. In addition, although the international airports selected were large enough, the limited resources had made the process of such a selection less scientific. For future research, the typology of Internet shoppers discovered should be thoughtfully considered for marketing purpose as well as for long-term strategic planning. Studying this typology within the context of strategic management paradigm to develop marketing plans to achieve long-term competitive advantages is next.

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## **Employees' Perceptions of Organizational Trust and Service Climate: A Structural Model Combining Their Effects on Employee Satisfaction**

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### **Abstract**

In this paper, the authors extend prior research on employees' perception of service climate by testing the impact of employees' perception of organizational trust on service climate and employee satisfaction. Results support the hypothesized relationships between the constructs, in that trust impacts service climate and employee satisfaction respectively while service climate impacts employee satisfaction in a significant way. Implications for practitioners and future research ensue, which underscores the importance of building trust and service climate to ensure employee satisfaction in hotel firms.

**Key Words:** Organizational Trust, Service Climate, Employee Satisfaction, Multidimensional Model.

### **Introduction**

Trust has been conceptualized by theorists as essential to organizational performance (Mayer and Gavin, 2005; Argyris, 1964). Past research has provided support to the relationship between organizational trust and job satisfaction (Muchinsky, 1977; Driscoll, 1978; Rich, 1997) while suggesting that employees' job related satisfaction is impacted by the level of trust among actors in an organization. Also, employees' perception of service climate has been used as a measure to study relationships with other organizational variables, notably employee satisfaction (Bailey and Dandrade, 1995) and customer's perception of service (Johnson, 1996; Schneider, Wheeler, and Cox, 1995; Schneider and Bowen, 1995; Schneider, 1990; Schneider, Parkington, and Buxton, 1980). While past research provides the foreground in this study in formalizing the relationship between constructs, we extend prior conceptualizations of trust and job satisfaction as well as service climate and satisfaction related measures in developing a multidimensional structural model that combines the effects of trust and service climate on employee satisfaction.

Since organizational trust is essential in creating and sustaining employee satisfaction (Shockley-Zabalak, Ellis and Winograd (2000); Driscoll, 1978), and since service climate impacts employee satisfaction (Bailey and Dandrade, 1995), a model that relates trust, service climate, and employee satisfaction would be equally important in defining how employees view the impact of trust on their perceptions of service and satisfaction levels. This would provide a basis for managers to develop a service climate with organizational trust as the foundation in sustaining higher levels of employee satisfaction.

### **Constructs and Dimensions**

#### *Organizational Trust*

Trust is a multilevel construct that is an outcome from interactions at the "co-worker, team, organizational and interorganizational levels" (instituteforpr.com). Shockley-Zalabak et al. (2000), define organizational trust as the "expectations individuals have about networks of organizational relationships and behaviors" (p. 37). We adopt this definition of trust in this paper, while suggesting that organizational trust results when there is competence, integrity and openness in the relationship between organizational actors, which per Gilbert and Tang (1998, p. 322) develops a feeling of "confidence and support in an employer".

Organizational trust has been defined as a multidimensional construct (Shockley-Zalabak et al., 2000; Mishra, 1996). Several terminologies for trust dimensions have been used in the literature, which include competence, integrity,

commitment, dependability, openness, concern for employees, reliability, openness/honesty (Shockley-Zalabak et al. 2000; Mishra, 1996; Morgan and Hunt, 1994; instituteforpr.com). The first dimension, i.e., integrity refers to the organizational characteristic of being fair in intra and interorganizational transactions. The second dimension, i.e., commitment, is one party's willingness to spend "energy to maintain and promote" (instituteforpr.com; p. 8) the relationship with another party. In the organizational trust context, this is also referred to as the "Identification" dimension, which relates to "how individuals manage the paradox of separation and association as an organizational member" (Shockley-Zalabak et al., 2000; p. 40). The third dimension, i.e. dependability, also referred to as the reliability dimension in the extant literature, captures the element in relationships between parties that pertain to characteristics such as faithfulness, reliability, and consistency (instituteforpr.com). The fourth dimension, i.e., competence, identifies trust from the viewpoint or perception of the actor on the organization's ability to compete in the market, including the leadership qualities of the organizational members, which collectively create a perception of organizational competence/incompetence (Shockley-Zalabak et al., 2000, Mishra, 1996).

#### *Service Climate*

Using Schneider and Bowen's (1995) conceptualization of service climate, Johnson (1996; p. 831) defines the service climate of a firm as "the perceptions incumbents share about what is important in the organization, obtained through their experiences on the job and their perceptions of the kinds of behaviors management expects and supports." Research related to employee perceptions of service climate (e.g., Schneider et al., 1980) has been robust in the service literature in developing dimensions related to the service climate of firms. These dimensions are described below.

Johnson's (1996; see p. 837 for definitions) description of the dimensions of service climate serves as the basis for development of this construct in this paper. These dimensions relate to service strategy, service support, service systems, rewards and recognition, management service orientation, and employee service orientation, which capture service climate more comprehensively from the context of this study. Moreover, these dimensions were developed by Johnson (1996) based on the works of Schneider and Bowen (1995), Albrecht and Zemke (1985), and Schneider, Wheeler and Cox (1991).

#### *Employee Satisfaction*

The construct related to employee satisfaction was developed using Driscoll's (1978) study that identified items pertaining to job related factors such as security, promotion, participation in decision-making, salary etc. Similar measures barring environment related factors were used by Nagy (2002) in a study that captured job satisfaction. We combined these items with the measures of satisfaction in the guidelines provided by the Institute for Public Research (instituteforpr.com) to develop the construct of employee satisfaction.

#### **Hypotheses**

*Hypothesis 1: Employee perceptions of organizational trust will be positively related to employee perceptions of service climate.*

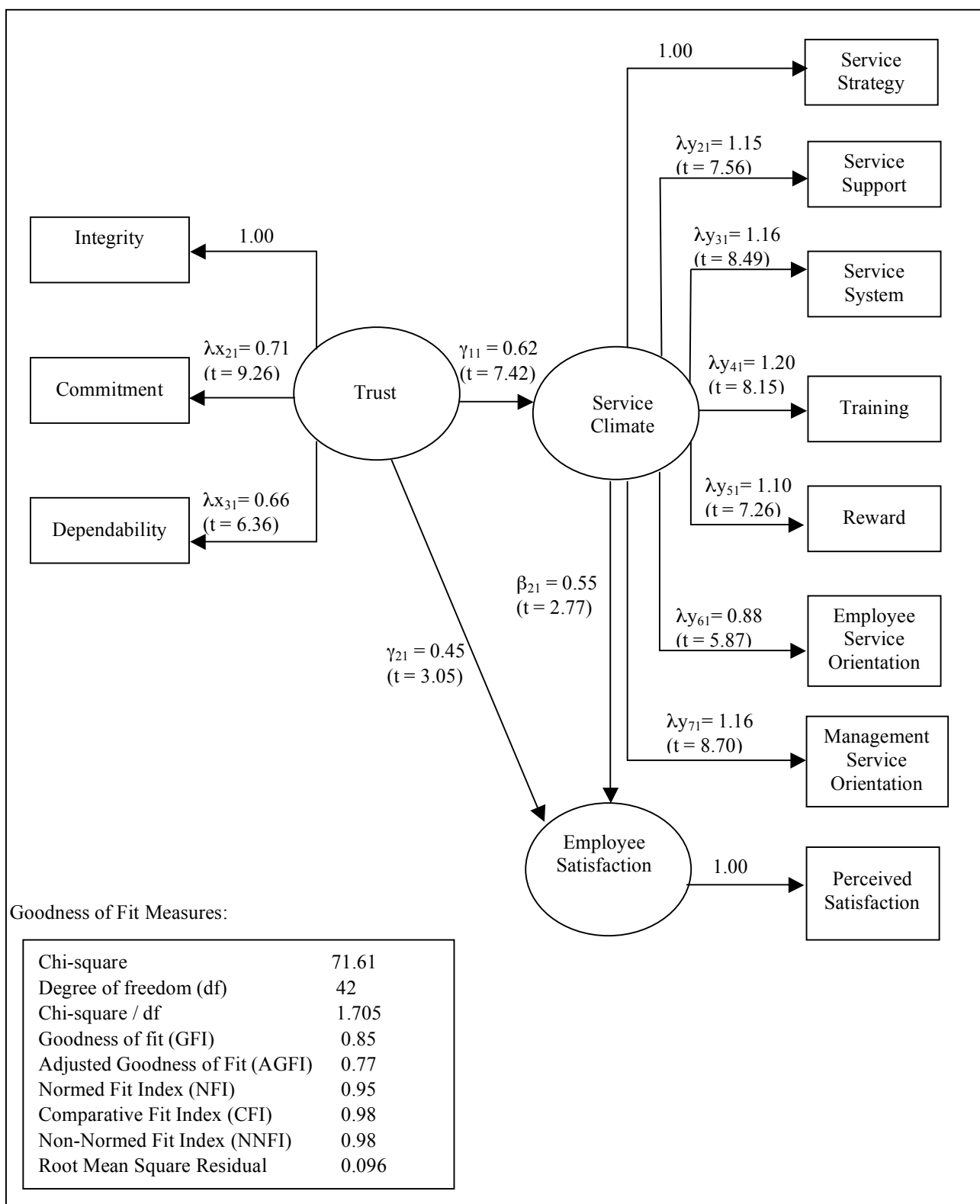
*Hypothesis 2: Employee perceptions of organizational trust will be positively related to employee satisfaction.*

*Hypothesis 3: Employee perceptions of service climate will be positively related to employee satisfaction.*

#### **Research Instrument and the Sample**

Based on the recommendation of researchers in the organizational trust literature (e.g. Shockley-Zabalak et al., 2000), data for this research were gathered from a major metropolis in Asia. Employees of four 5-star hotels (equivalent to upscale hotels in the United States) were identified as the source of data. It should be noted that these hotels were affiliated with international chains of repute and were not related to each other. A total of 150 survey questionnaires were distributed, out of which 77 respondents completed the survey in its entirety, which was the sample size for data analysis. The items in the questionnaire were pre-tested and corrected using the responses provided by faculty members of a Business School (the business school includes a hospitality management program) located in the same city where the survey was conducted. In the survey, respondent perceptions were measured using a Likert-type scale of 10 points, with 1 standing for strongly disagree, 5 for Neutral, and 10 for Strongly Agree. This even number of response scale was adopted without middle neutral or undecided choice, in order to force the respondent to decide whether they lean more towards "agree" or "disagree" end of the scale for each item (Socialresearchmethods.net). Each of the observable variables was measured by several questions. The items for each variable were checked for construct validity and reliability using SPSS. Typically, a scale is said to be reliable if Cronbach alpha is 0.70 or higher. The items all had high reliability coefficients, ranging from 0.76 to 0.90.

Figure 1  
Model for Relationships between Trust, Service Climate, and Employee Satisfaction



## Results and Analysis

The survey data was analyzed with LISREL confirmatory factor analysis, a tool designed for the analysis of covariance structure model (Jöreskog & Sörbom, 1989; Long, 1983). The final model is given in Figure 1. Maximum Likelihood Estimation (MLE) was used to obtain the structural coefficients, which according to the literature, can be used for ordinal data with five categories or more (Chass.ncsu.edu). Since a 10 point Likert-type scale was used for this study, MLE's use is supported. Moreover, for MLE, multivariate normality is a key assumption, which is found when the distribution of each variable is normal in relation with the other variable(s) used in the analysis (Chass.ncsu.edu). The Mardia's statistic was used to compute the relative multivariate kurtosis, which should be less than 3 (while using the PRELIS PK function) to assume a multivariate normal distribution of the variables used in the analysis (Chass.ncsu.edu). The PRELIS software was used to conduct this test. Results indicate a Mardia's statistic of 1.351, which is less than 3. Therefore, the multivariate normality assumption is met, thus providing support to the use of MLE. The final model is detailed in Figure 1 with the latent constructs of trust and service climate. The chi-square per degree of freedom should be used instead of the chi-square statistic. The ratio of the model in Figure 1 is 1.705 (chi-square = 67.78 with 43 degrees of freedom), indicating a very good fit. The model has a RMSR of 0.096, GFI of 0.85, a NFI of 0.95., AGFI of 0.77, NNFI of 0.98, and CFI of 0.98, all indicating reasonably good fit

Results indicate that  $\beta_{21}$  is 0.55 ( $t = 2.77$ ) and is significant at the 0.05 level. While supporting hypothesis 3, this shows that higher perceived service climate would lead to higher employee satisfaction, with one unit increase in the level of perceived "Service Climate" leading to 0.55 units increase in "Employee Satisfaction" levels. Since  $\gamma_{11}$  is 0.62 ( $t = 7.42$ ), this suggests that "Service Climate" as a latent variable in turn depends on the latent variable of "Trust", with one unit of "Trust" leading to 0.62 unit increase in the level of perceived "Service Climate". This supports hypothesis 1. In addition,  $\gamma_{21}$  is 0.45 ( $t = 3.05$ ), this suggests that "Employee Satisfaction" depends on the latent variable of "Trust", with one unit of "Trust" leading to 0.45 unit increase in the level of perceived "Employee Satisfaction". This supports hypothesis 2.

## Implications, Limitations and Conclusion

The results of this study suggest that "Employee Satisfaction" of hotel employees can be improved by enhancing "Trust" and "Service Climate" of the hotel as perceived by the employees. "Trust" is composed of several aspects, including perceived "Integrity" of organization to employees, perceived "Commitment" of the organization to employees, and perceived "Dependability" of the organization that the employees can place on. To develop better employee satisfaction, the organization needs to enhance the trust of the employee to the organization by improving how employees view organizational variables related to integrity, commitment, and dependability. On the other hand, "Service Climate" is composed of several aspects including "Service Strategy", "Service Support", "Service System", "Training", "Reward", "Employee Service Orientation", and "Management Service Orientation". To develop better perceived service quality, hotels need to consider how to improve on these areas of service climate. It is imperative that management pays attention to all aspects of service climate in their organization, such that employees' perceptions of service climate are favorable in order for them to serve the customers well.

While our study purports the hypothesized model, it is essential to point out the limitations of our study. First, the sample is limited, in that only 77 surveys were used in this study although our study entails a sample from outside the United States based on recommendations of researchers in the trust domain (e.g. Shockley-Zabalak et al., 2000). Second, the sample was not big enough to use random equalized subsamples from hotels in each ranking category, which future research should pursue while using such a sample in order to confirm the generalizability of the model. Future efforts should test the model using a sample with data from organizations based in different countries (including multinational organizations) in order to verify the model.

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## Measuring Resident Reactions To Community Tourism Development: Proposal For New Conceptual Framework

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### Abstract

This study proposes a new conceptual framework for understanding resident reactions to community tourism development. The proposed framework is an integration of social exchange theory with the theory of reasoned action. This study may benefit scholars, business analysts, and decision makers by clarifying the underlying theoretical concepts that explain what perceptions residents have toward tourism, how they evaluate these perceptions, and why they decide to support or not support tourism. Decision makers need a long-term approach to monitor resident reactions to tourism development in a specific community.

Key Words: community tourism, tourism development, resident reactions, and impacts of tourism.

### Introduction

Since the late 1980s, tourism researchers have paid much attention to understanding resident reactions to tourism development in a community. This focus corresponds to a new trend emerging in the market: more and more cities and regions have begun to consider tourism an important means to boosting the local economy and revitalizing sleepy communities (Anderick & Vogt, 2000). The success of tourism development in a community is the result of many factors. Of these, one that both scholars and practitioners have identified is resident reactions. As Menning (1995) and Richardson and Long (1991) have argued, tourism development in a community is not simply a matter of matching product supply with tourist demand; local residents' financial and leisure needs and wants, acceptability, and support must also be considered. The literature reveals two major focuses in community tourism: cultural tourism and ecotourism. Both focuses highlight the role of local residents in community tourism development: local residents are part of the "attraction," the tourism product that a community offers to tourists. Their lives can be greatly influenced by tourism development, while at the same time their attitudes and behavior can greatly influence the satisfaction and overall experience of tourists in the community; they are, therefore, vital to the success of community tourism.

Two patterns of research can be identified from previous studies on local resident reactions to community tourism development. Early studies, published in the late 1980s and early 1990s, showed a pattern of "tourism impact" (Anderick et al., 2000). Most of these studies focused on understanding the perceived impact of tourism by residents on a local community and their lives. Agreement scales were usually used. As Ap (1990) contended, most of these early studies were exploratory in nature and primarily descriptive. Ap called for theoretical orientation and operational definitions of the central concepts in understanding resident reactions to tourism. More recent studies, published in the past decade, have demonstrated a broader approach. They have not only examined the impact of tourism as perceived by residents, but also investigated residents' potential or actual support for tourism development. Some of these studies have tried to apply a theoretical paradigm to determine whether a relationship exists between the impact perceived by residents and their potential or actual support. As summarized by Andriotis and Vaughan (2003), theories adopted by previous studies include CAC (cognitive, affective, and behavioral components of attitudes), play theory, compensation theory, conflict theory, dependency theory, social exchange theory, and social representation theory. Among these, the social exchange theory (SET) has been most frequently applied.

The appropriateness of SET as a theoretical framework for understanding resident reactions to tourism development was briefly mentioned by Perdue, Long, and Allen (1990) and later elaborated by Ap (1992). Apparently this theory has gained much support from other researchers. However, a review of this research literature suggests that the limits inherent in SET have prevented a complete understanding of resident reactions to tourism development. Although SET partially explains why residents either support or do not support tourism, it does not clarify the definitions and relationships between the key theoretical concepts, nor does it provide operational measures for these key concepts. As a result, its soundness in helping researchers understand resident reactions become problematic. This study therefore proposes an alternative framework for understanding resident reactions to community tourism development. This study may benefit scholars, business analysts, and decision makers by clarifying the underlying theoretical concepts that explain what perceptions residents have toward tourism, how they evaluate these perceptions, and why they decide to support or not support tourism. Decision makers need a long-term approach to monitor resident reactions to tourism development in a specific community.



## Literature Review

The proposed framework for this study involves the integration of SET with the theory of reasoned action (TRA). The following text first discusses SET and its applications to community tourism and then proceeds to the proposed framework.

### *Social Exchange Theory (SET)*

Social exchange theory (SET) examines the exchange of rewards and costs to quantify the values of outcomes from different situations for an individual or a group (Thibault & Kelley, 1952). The theory suggests that people strive to minimize costs and maximize rewards. Their likeliness of developing a relationship with someone is based on perceived possible outcomes; when they perceived outcomes to be positive (i.e., rewards exceed costs), they will disclose more information and develop a relationship with that person. Applying this theory to tourism, Ap (1992) contended that SET was an appropriate theoretical framework to explain why and under what situations local residents harbor positive attitudes toward and support for tourism. Ap's view gained much acceptance in later studies. For instance, McGehee et al. (2004) tested the model developed by Perdue et al. (1990) using SET as the foundation; Deccio et al. (2002) replicated Jurovski's (1994) model, which was built on SET.

However, a close examination of the literature reveals conflicting findings in studies that have applied SET. For instance, although Perdue et al. (1990) found that the perceived personal benefit from tourism development could predict support for it, McGehee et al. (2004) found that the existence of a perceived personal benefit from tourism did not significantly predict support for tourism planning. Moreover, Andereck et al. (2000) found "a positive relationship between perceived negative impacts of tourism and resident support for its development" (p. 35), a finding that obviously contradicts the essence of SET, which holds that only "rewards" or "perceived positive outcomes" lead to the formation of a relationship between individuals or groups (i.e., support for tourism). A further examination of the literature reveals that many authors appear to have different interpretations of the central theoretical concepts tested in their studies, which include resident perceptions toward tourism, resident attitudes toward tourism, and resident support for tourism (these concepts will be noted as "perceptions," "attitudes," and "support" in the following text). It is evident that many authors have used the two terms "attitude" and "perception" interchangeably. However, as Ap (1992) pointed out, there is a fine distinction in meaning between these two terms. As quoted by Ap (1992), Kurtz and Boone (1984) defined perception as representing the meaning that is attributed to an object, whereas attitude represents a person's enduring predisposition or action tendencies toward some object. In the study of consumer behavior, "perceptions toward tourism" implies a resident's knowledge of or beliefs toward tourism, that is, a resident's cognitive responses to marketplace stimuli. Meanwhile, "attitude" is an emotive component in a resident's responses to marketplace stimuli and describes a person's relatively consistent evaluations, feelings, and tendencies toward an object or idea. A person's attitude has two properties: direction (e.g., good vs. bad; like vs. dislike) and extremity (e.g., somewhat good, fairly good, very good, and extremely good). Failing to recognize the difference between "perception" and "attitude" has contributed to the contradictory findings in previous studies.

Only a few of the early studies that were published before Ap's (1992) article looked at the relationship between resident attitudes and support for tourism development; most of the early studies assumed an automatic relationship between positive attitude and support, that is, positive attitude implied support. More recent studies, especially those published after Ap's (1992) rationalization of SET, have tested the relationship between attitude or perceptions and support. However, different authors apparently have different interpretations of the concept of "support," as reflected in different scales used to measure it. For instance, King, Pizam, and Milman (1993) used "overall opinion about tourism" (oppose vs. favor) to measure "support;" Perdue et al. (1990) asked residents whether they felt the community should try to attract more tourists; Snaith and Haley (1995) asked residents whether they were willing to pay a local tax; Andereck et al. (2000) used an acceptability scale; Vincent et al. (2002) asked residents whether they were willing to pay a fee to attend associated events and activities; Snepenger et al. (2001) used an agreement scale; Deccio et al. (2002) used an oppose-support scale on four items; and Sirakaya et al. (2002) directly asked residents whether they supported tourism infrastructure and attractions, and the hospitality industry.

How a resident's support for tourism should be measured resides in the clarification of its definition. In Webster (1983), "support" is defined as follows: (a) to endure quietly or bravely, (b) to promote the interests or causes of, or to defend as valid, or to advocate, (c) to bid in bridge, or, to provide with substantiation, and (d) to hold up or serve as a foundation. In the study of consumer behavior, support is considered a type of behavior or action. It marks a consumer's behavioral responses (e.g., to purchase or not purchase a product; to stay or not stay in a transactional relationship) to marketplace stimuli. Among existing studies, only Snepenger et al. (2001) used behavioral scales to measure local residents' levels of support for tourism. They listed these scales as (a) I reschedule activities in my community to avoid tourist crowds, (b) I tend to avoid areas frequented by tourists, and (c) if I could, I would leave my community because

tourism has negatively influenced the community. Apparently, SET is not sufficient to account for some conflicting and confusing findings in the existing studies. This calls for an alternative framework that can offer clear definitions for the theoretical concepts as well as identify the relationships among them. SET and the theory of reasoned action (TRA) together can accomplish this task.

#### *Theory of Reasoned Action (TRA)*

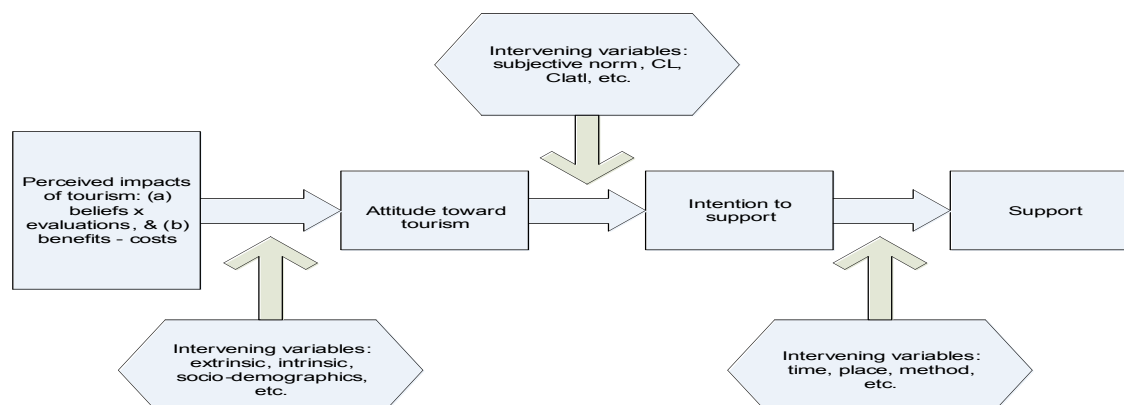
The theory of reasoned action (TRA) was advanced by sociologists Ajzen and Fishbein (1980), which is accepted in many fields, consists of four main components: beliefs, attitudes, intention, and behavior. These authors contended that a person's behavior is determined by his or her intention to perform the behavior and that this intention is, in turn, a function of this individual's attitude toward the behavior and his or her subjective norm. This person's attitude, moreover, is an index of the degree to which the person likes or dislikes an object, where "object" is used in the generic sense to refer to any aspect of the individual's world; therefore, a person's attitude toward a behavior is determined by the set of salient beliefs he or she holds about performing the behavior. Salient beliefs, according to Ajzen and Fishbein, are a small number of beliefs that have significant influence on attitude. As Ajzen and Fishbein stated, the subjective norm is a function of normative beliefs. "Subjective norm" is defined as a person's "perception that most people who are important to her or him think she or he should or should not perform the behavior in question." In forming a subjective norm, an individual takes into account the normative expectations of other sources that are important to him or her. To determine subjective norms, salient referents need to be identified. Again, in the context of an actual study, a model of normative referents needs to be created. The subjects' motivation to comply is then measured by asking how much they want to do what their referents think they should do. The product of each normative belief multiplied by a subject's corresponding motivation to comply will be summed. The outcome is then used to predict a subject's attitude. According to Ajzen and Fishbein (1980), intentions are the probability, as rated by the subject, that he or she will perform the behavior. An individual's behavioral intention is the most immediate factor influencing his or her behavior. This intention is a function of the individual's attitude and subjective norm. These authors also stated that variables not included in their model could affect intention and, consequently, behavior. However, these variables must first significantly affect the attitude or normative belief component and their weights. Ajzen and Fishbein defined that behavior as the transmission of intention into action, which can be influenced by many factors such as time, place, and methods used to take an action.

Apparently, TRA clarifies not only the definitions of "perceptions" (beliefs), "attitudes" and "support," but also the relationships among these concepts. From the perspective of consumer behavior, TRA covers all consumer responses that marketers like to observe when launching a new product or marketing campaign: consumers' cognitive responses (beliefs or knowledge), affective responses (attitudes), and behavioral responses (intention to engage in an exchange relationship, and engaging in an exchange relationship).

#### **Proposal for A New Framework**

Based on the preceding discussions, this study proposes a new theoretical framework. Figure 1 depicts this model by displaying the central concepts in community tourism (i.e., perceptions, attitudes, and support), and their relationships.

Figure 1  
Model of Resident Reactions to Tourism Development



From right to left, this model displays the following relationships: (a) residents' support for tourism development is a result of their intention to support it, the transferring process of which is influenced by intervening variables such as time (when to support), place (where to support), method (how to support), and other variables; (b) residents' intention to

support or not to support tourism is a result of their overall attitude toward tourism, the relationship of which is influenced by a Comparison Level (CL) or a Comparison Level of Alternative (CLalt); and (c) residents' attitude toward tourism is the summation of all products of residents' beliefs about and evaluations of the impact of tourism; this is greatly influenced by the subjective estimation of the difference between positive and negative perceptions toward tourism. In addition, this attitude is subject to the influence of residents' socio-demographics, subjective norms, the nature of tourism development such as levels of development, and the levels of resident involvement in decision making. The following is a further discussion of model variables and propositions.

#### *Salient Beliefs, Attitudes, and Intervening Variables*

SET suggests that residents' attitudes toward tourism development arise from what they perceive to be its positive and negative influences. In tourism research, researchers have repeatedly identified these "positive aspects of tourism" as "benefit and opportunities," and "negative aspects of tourism" as "costs and concerns." Benefits and opportunities include more employment and business opportunities, increased tax revenues for local governments, infrastructure and recreational opportunities for local people, enriched social life, restoration of historical sites, preservation of local cultures, and conservation of natural resources. Costs and concerns, on the other hand, include traffic congestion, increased crime rate, increased cost of land and housing, increased price of goods and services, changes in traditional culture, deterioration of the natural environment, and decreased life quality. Tourism researchers have identified many intervening variables that can influence a person's attitude toward tourism. This study adopts Andriotis and Vaughan's (2003) method to categorize these factors into three groups: (a) extrinsic variables, including stage of tourism development in the host community, type of tourists, and seasonality; (b) intrinsic variables, including distances that residents live from tourism zones, resident involvement in tourism, resident economic or employment dependency on tourism, and attachment to the community; and (c) socio-demographic characteristics, including gender, age, education, and income. As SET suggests, if a resident perceives that the benefits created by tourism are greater than the costs it creates, this person has sufficient reason to hold a positive attitude toward it (Ap, 1992). Therefore, this study makes the following propositions:

- H1: When the benefits from tourism are perceived to be greater than the costs, residents will have a positive attitude toward tourism; this relationship will be mediated by extrinsic and intrinsic as well as socio-demographic variables.
- H2: When the benefits from tourism are perceived to be less than the costs, residents will have a negative attitude toward tourism; this relationship will be mediated by extrinsic and intrinsic as well as socio-demographic variables.

#### *Intention to support and intervening variables*

As implied by TRA, intention is a function of an individual's attitude and subjective norm. That is, whether a resident is or is not willing to form a relationship with a tourist depends on both this individual's attitude and subjective norm. However, in SET, subjective norm is usually treated as an intervening variable (Thibault & Kelley, 1975). This simplifies the understanding of the formation of an exchange relationship, and a positive attitude toward tourism becomes the only critical factor in a resident's willingness to participate in a relationship with potential tourists. However, according to social theorists, positive attitude toward an object does not always lead to a relationship. In other words, forming or staying in a relationship is not simply a matter of how rewarding that relationship is. The concepts of Comparison Level (CL) and Comparison Level of Alternative (CLalt) help explain the rationality of this argument. CL, which was developed by Thibault and Kelley (1975), suggests that a person's previous experiences and expectations help determine how satisfied that person is with the reward that a possible relationship is likely to create. If the reward exceeds the CL (particularly highly valued outcomes or ones that are important to individuals), the probability of a person entering a relationship is high. CLalt, also developed by Thibault and Kelley, provides the rationality behind a person choosing to stay in or leave a relationship. CLalt refers to the lowest level of outcomes a person will accept from a relationship in light of available alternatives. When the outcomes (e.g., satisfaction, benefit, etc.) available in an alternative relationship exceed those available in the first relationship, the likelihood increases that this person will leave the relationship. With respect to tourism, Ap (1992) identified CL as "an acceptable level of satisfaction." He explained that residents attempt to obtain a satisfactory, reasonable, or acceptable level of benefits from social exchange relationships when maximization of benefits does not occur; therefore, if the benefits of tourism meet an acceptable level of satisfaction determined by a resident, this resident will assign a positive value or attitude toward tourism. No recent studies have considered the influence of CLalt on residents' intention to support tourism. Therefore, this study makes the following additional propositions:

- H3: When residents have a positive attitude toward tourism, they are likely to support tourism development; this relationship is mediated by an acceptable level of comparison (CL) and availability of other alternatives (CLalt).

- H4: When residents have a negative attitude toward tourism they are likely not to support tourism; this relationship is mediated by an acceptable level of comparison (CL) and availability of other alternatives (CLalt).

#### *Support for Tourism and Intervening Variables*

Intention to support does not always result in immediate support. However, it does reinforce acceptance and positive attitude toward an object and is, therefore, likely to lead to future action (Lindquist et al., 2003). Major variables identified in the literature of consumer behavior that influence this transferring process include time, place, and method. "Time" refers to when to support; "place" refers to where to support; and "method" refers to how to support. In studying consumer behavior, researchers suggest that understanding "behavior intention" is key to predicting and influencing planned behavior. However, measures of intention may not provide accurate results due to changing situational influences. In community tourism development, whether to measure resident intention to support or not support should depend on several issues: (a) if tourism development is to be introduced, researchers need to measure intention; (b) if tourism development is at the introduction stage and resident awareness is low, researchers need to measure awareness and intention to support; (c) if tourism development is at the growing stage, researchers need to measure both intention to support and not support; and finally, (d) in a mature tourist destination, researchers should focus on other outcomes (e.g., post-purchase behavior such as resident satisfaction level with tourism development) rather than behavior (i.e., support).

#### **Conclusion and Future Research**

The framework proposed in this study highlights the central concepts in understanding resident reactions to community tourism development and their relationships. Residents' support for tourism is a transfer of their intention to support, which is a possible result of their positive attitude toward tourism development. If a resident perceives that the benefits created by tourism development exceed its costs, this individual is likely to have a positive attitude toward tourism. Researchers, analysts, and decision makers, when attempting to measure these relationships, must consider intervening variables that could influence the formation of a relationship. Without a comprehensive understanding of how and why residents react to tourism development, the desire by decision makers to gain the support of residents is like seeking a solution in the dark. The framework proposed by this study, grounded in both SET and TRA, provides the first steps toward understanding these issues. The immediate future study following this one is to collect empirical data and to test the proposed hypotheses. It is hoped that this study will stimulate further discussion on community tourism development.

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## Hotel Stock Performance Under Different Monetary Policy Environments

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### Abstract

This study further examines the performance of Taiwanese hotel stocks under two various monetary policy environments, namely expansive and restrictive. Using changes in the discount rate allows us to effectively measure the monetary policy changes and classify the monetary environment as either restrictive or expansive. Empirical results show that hotel stocks exhibited a higher mean return, lower risk and higher Sharpe ratio during expansive monetary periods. In response to monetary policy developments, the implication for hotel stock investors to reallocate their investment portfolios is provided.

Key Words: Hotel; Stock returns; Monetary policy; Discount rate; Taiwan

### Introduction

The association between stock returns and macroeconomic (macro hereafter) variables has been well conducted in the fields of economics and finance (Chen, Roll and Ross, 1986; Campbell, 1987; Fama and French, 1988; Asprem, 1989; Wasserfallen, 1989; Bulmash and Trivoli, 1991; Booth and Booth, 1997; Nasseh and Strauss, 2000; Chen, 2003). In comparison, within the hospitality literature, there are only a few research papers examining the link between macro factors and hospitality stock returns (Barrows and Naka, 1994; Chen, Kim and Kim, 2005; Chen, 2006a; Chen, 2006b; Chen and Kim, 2006).

Barrows and Naka (1994) tested whether five selected economic variables, namely growth rates of industrial production, money supply, domestic consumption, expected inflation rate, term structure of the interest rate, could influence U.S. hospitality stock returns. They found that, among five economic variables, growth rates of money supply and domestic consumption had a significantly positive impact on the hospitality stock returns, whereas the expected inflation rate affected the hospitality stock returns negatively. Interactions between business conditions and financial performance of tourism firms in both China and Taiwan were examined in Chen (2006a). Chen (2006a) investigated whether the improvement of business conditions (proxied by gross domestic product and industrial production) enhances stock performance of tourism firms and whether financial success of tourism firms matters to business development. Empirical results showed that a long-run equilibrium relationship existed between business conditions and financial performance of tourism firms, and further these two factors reinforced each other in both China and Taiwan.

Following Barrows and Naka (1994), Chen, Kim and Kim (2005) and Chen (2006b) tested a set of macro variables as determinants of hotel stock returns in Taiwan and China respectively. Chen et al. (2005) detected that money supply growth rates and changes in unemployment rates are two influential macro factors of Taiwanese hotel stock returns, while Chen (2006b) showed that significant macro determinants of Chinese hotel stock returns included changes in discount rates, industrial production growth rates, growth rates of imports and changes in yield spread. Chen (2006b) further reported that among macro forces, the monetary policy variable appeared to be the only macro factor that could consistently and significantly explain hotel stock returns in China, Taiwan and US. Chen and Kim (2006) argued that when examining the relationship between macro factors and hospitality stock returns, Barrows and Naka (1994), Chen *et al.* (2005) and Chen (2006b) used the ordinary least square (OLS) regression technique, which could fail to capture the long-run effect of economic variables on hospitality stock returns. They hence applied the cointegration and error-correction model to examine the long-run linkage between tourism stock prices and economic forces in Taiwan. Empirical results still showed that growth rates of money supply served as a significant predictor of tourism stock returns.

Singh and Kwansa (1999) pointed out the critical role of monetary policy in financing the lodging industry in the next millennium. They reported that based on the predictions of thirty-nine selected experts from the lodging and financial services industries, the Federal Reserve's monetary policy in the U.S. would be one of major forces that significantly influence the lending criteria and terms by financial institutions for hotel mortgages. This implies that the monetary policy would ultimately have a profound impact on the financial performance of hotel companies since the lending criteria and terms determine the ability of hotel companies to access the capital.

The purpose of this study, given the above illustration, is to further investigate the impact of monetary policy conducted by the Central Bank of China (CBC hereafter) on hotel stock returns in Taiwan. Specifically, we examine the Taiwanese hotel stock performance under two various monetary policy environments, namely expansive and restrictive, and test whether different monetary stringency influences the relationship between macro factors and Taiwanese hotel stock

returns. Note that Barrows and Naka (1994) and Chen et al. (2005) used growth rates of money supply as the monetary policy variables. Although an increase of money supply (a positive money supply growth rate) is associated with a decrease in the interest rate and hence an expansive monetary policy, the money supply has not been generally used as a good indicator of different monetary policy developments because of its frequent changes (Jensen and Johnson, 1995; Jensen, Mercer and Johnson, 1996; Johnson and Jensen, 1998; Johnson, Buetow, Jensen and Reilly, 1998; Conovar, Jensen and Johnson, 1999; Mann, Atrah and Dowen, 2004; Chen, Chen and Cho, 2006). Different from the monetary policy variables utilized in Barrows and Naka (1994) and Chen et al. (2005), we employed changes in the discount rate as the measure of monetary environment stringency developed by Jensen et al. (1996) and Johnson and Jensen (1998). This approach enables us to take a close look at how well hotel stocks perform under two explicitly different monetary policy conditions, i.e. expansive and restrictive monetary policy environments. Accordingly, this study can not only highlight the important role of monetary policy, but also provide a practical implication for hotel stock investors to reallocate their portfolios in a timely manner based on changes in the monetary policy movements.

### **Monetary policy and stock returns**

It is well known that the central bank, the government authority in charge of monetary policy, is the most important player in financial markets throughout the world (Mishkin and Eakins, 2006). Monetary policies conducted by the central bank can regulate interest rates, which in turn drive the firm's cost of capital and impact the real economy. Hence changes in the monetary policy can signal future direction of the economy by providing information about future business conditions and corporate earnings. According to the stock valuation model, the stock price is equal to the present value of all expected future cash flows (dividend payments) received from holding the stock. Consequently, changes in the monetary policy can affect the stock performance through changes in the future corporate earnings and discount rate used in valuing corporate cash flows. For example, the central bank can pursue a restrictive monetary policy by raising interest rates through an open market sale or through bringing up the discount rate. Once interest rates grow, companies are forced to pay more for borrowed funds, and thus lower corporate earnings. Moreover, the discount rate used to value firm's cash flows rises, making these cash flows worth less. Through this mechanism, monetary policy can be linked to asset returns. Empirical studies support this connection. Jensen and Johnson (1998) and Conovar et al. (1999) found a significant relationship between monetary policy changes and stock returns in the U.S. and several developed countries. Chen et al. (2006) reported a similar finding in the emerging Taiwan stock market.

To measure changes in the monetary policy, we followed the approach in Jensen et al. (1996) and Johnson et al. (1998) by using changes in the discount rate to categorize the monetary environment as either restrictive or expansive. Technically speaking, the central bank can provide reserves to the banking system by making discount loans to its member financial institutions or banks, and the discount rate is the interest rate that banks must pay to the central bank for discount loans (Mishkin and Eakins, 2006). The function of the CBC discount rate in Taiwan is similar to that of the Federal Reserve discount rate in the U.S. Laurent (1988) indicated three advantages of using changes in the discount rate as the monetary policy indicator. First, changes in the discount rate are perceived to be exogenous signals of the central bank actions and these signals are easy for the public to interpret. Second, discount rate changes are reported regularly and happen relatively infrequently. Third, discount rate changes are regarded as signaling or confirming for future course of monetary policy and possibly economic development.

To facilitate the analysis of the linkage between monetary policy and hotel stock returns, we divided the full sample of the monetary policy environment into two sub-samples, e.g. expansive and restrictive monetary periods. An expansive monetary period is associated with the one experiencing a drop in the discount rate, whereas a restrictive monetary period is the one with a rise in the discount rate. Based on this approach, the level of the discount rate is not the important parameter, and instead, it is the opposite direction of the rate change that matters. Therefore, a new monetary environment starts when a discount rate change in the opposite direction from the previous change is observed, and consecutive discount rate changes in the same direction are considered a continuation of the same monetary environment (Jensen et al., 1996; Johnson and Jensen, 1998). Jensen et al. (1996) and Booth and Booth (1997) provided convincing evidence that with the use of changes in the discount rate, they could successfully differentiate the monetary policy periods into two various monetary environments (expansive vs. restrictive) in the U.S. They illustrated that monetary supply measures and reserve aggregate were significantly various across two monetary regimes. Chen, Chen and Cho (2006) further proved that changes in the CBC discount rate also served as an effective indicator of the monetary policy movements in Taiwan.

### **Data and a preliminary examination**

The hotel stocks covered in this study included the stocks of Ambassador Hotel, First Hotel, Hotel Holiday Garden, and Leofoo Hotel. The selection of hotel stocks follows the criterion in Chen et al. (2005), which is in consideration of data availability. Monthly hotel stock prices over the period from January 1989 to January 2005 (193

monthly observations) were taken from the Taiwan Economic Journal (TEJ) database. We then computed the value-weighted hotel stock price index (*HPI*) using four hotel stock prices and monthly hotel stock returns:

$HR_t = (\ln HPI_t - \ln HPI_{t-1}) \times 100$ . Discount rate data were also obtained from the TEJ database. Over the full sample period from January 1989 through January 2005, the Central Bank of China changed the discount rate 39 times: 10 increases and 29 decreases. In total, there were 11 rate-change series, 5 decreasing and 6 increasing. Rate change series are considered because it is assumed to be under the same monetary policy until a discount rate change in the opposite direction is observed. Months during which the first rate change in a series occurred are eliminated from the sample, resulting in a drop of total number of observations from 193 months to 182 months. We omitted those 11 months due to the following reason. As mentioned, it is our intention to examine 1) the performance of hotel stocks under different monetary periods, and 2) the impact of various monetary policy circumstances on the link between hotel stock returns and macro factors. Thus, it is appropriate to remove these months that mark the initiation of a new monetary environment and hence embrace both expansive and restrictive days. Accordingly, we found that of the 182 months retained, 125 follow discount rate decreases and 57 follow discount rate increases. Table 1 provides summary information on the discount rate change series.

Table 2 presents mean returns, standard deviations and Sharpe Ratios of monthly hotel stocks over the entire sample period and two different monetary periods. Test results for difference in mean and in standard deviation of hotel stock returns between two monetary periods are also provided in Table 2. The mean hotel return over the full sample is  $-0.44\%$ . However, hotel stocks have greater mean return during expansive monetary periods ( $0.95\%$ ) than during restrictive periods ( $-3.5\%$ ). The difference in the mean return of hotel stocks is  $4.45\%$ , which is statistically significant difference in their means at the 5% level. These findings illustrate that hotel stocks had better performance under an expansive monetary environment. Results in Table 2 also indicate that the standard deviation of hotel returns is higher in restrictive monetary periods ( $15.22\%$ ) than in expansive periods ( $13.87\%$ ). In other words, hotel stock returns are more volatile during restrictive periods. However, the difference in standard deviations of hotel returns between two monetary environments is not statistically significant.

The Sharpe ratio is given as follows:  $Sharpe\ ratio = (\bar{r} - \bar{r}_f) / \sigma$ , (1)

Where:  $\bar{r}$  is the mean annualized hotel stock return,  $\bar{r}_f$  is the mean risk-free rate and  $\sigma$  is the standard deviation of the annualized hotel returns. For the risk-free rate, we use the monthly series of the 3-month time deposit rate, which is annual rate and taken from TEJ database.

Table 1  
Discount rate change series: January 1989-January 2005

Series	Increasing (I) or Decreasing (D)	First rate change in series	Rate changes in series	Monthly observations in series
1	I	July 1989	2	29
2	D	July 1991	5	9
3	I	May 1992	1	4
4	D	October 1992	2	27
5	I	February 1995	1	4
6	D	July 1995	3	24
7	I	August 1997	1	12
8	D	September 1998	4	17
9	I	March 2000	2	8
10	D	December 2000	15	45
11	I	October 2004	3	3

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

As shown in Table 2, the Sharpe ratio of hotel stock returns is  $-0.07$  over the entire sample period,  $-0.30$  during restrictive periods and  $0.04$  during expansive periods. The Sharpe ratio is positive only in the expansive monetary environment, implying that hotel stocks offer a better reward per unit of risk in expansive periods. Further, the negative Sharpe ratio of hotel returns in restrictive periods implies that hotel stock investors would have achieved better investment performance simply by holding risk-free asset instead of hotel stocks during restrictive monetary periods.



Table 2  
Mean Returns, Standard Deviations (SDs) and Sharpe Ratios of Monthly Hotel Stocks

	Full sample	Expansive period	Restrictive period	Difference in means	<i>t</i> -statistics ( <i>p</i> -value) for difference in means
Mean Return	-0.44	0.95	-3.50	4.45	1.95 (.05) **
	Full sample	Expansive period	Restrictive period	Difference in SD	<i>F</i> -statistics ( <i>p</i> -value) for difference in SD
Standard deviation	14.30	13.87	15.22	1.35	-1.21 (.44)
	Full sample	Expansive periods	Restrictive periods	Difference in reward ratios	---
Sharpe Ratio	-0.07	0.04	-0.30	0.34	---

The data excludes months of changes in the monetary policy. \*\* Significant at the 5% level.

### Regression analysis and results

In this section, we followed Johnson and Jensen (1998) to formally examine the connection between hotel stock returns and changes in the monetary policy based on Eq. (2):  $HR_t = a_0 + a_1 DR\_dummy + v_t$ ,

(2)

where  $HR_t$  are the monthly hotel returns and  $DR\_dummy$  is the dummy variable of changes in the discount rate, which takes one during restrictive monetary periods and zero during expansive monetary periods. To obtain consistent estimates in regression coefficients, standard errors, and associated *t*-statistics by correcting the possible presence of autocorrelation and heteroscedasticity, the approach proposed by Newey and West (1987) is used. Additionally, to control for the possible impact of other macro variables on the relationship between monetary policy dummy variable and hotel stock returns, we added five economic factors tested in Chen et al. (2005) as another explanatory factors and performed the following regression:

$$HR_t = \alpha_0 + \alpha_1 \Delta MS_t + \alpha_2 \Delta UEP_t + \alpha_3 \Delta IP_t + \alpha_4 \Delta EINF_t + \alpha_5 \Delta SPD_t + \alpha_6 DR\_dummy + \varepsilon_t, \quad (3)$$

where  $\Delta MS_t$ ,  $\Delta UEP_t$ ,  $\Delta IP_t$ ,  $\Delta EINF_t$ ,  $\Delta SPD_t$  and  $\varepsilon_t$  denote growth rates of money supply (M2), changes in unemployment rates, industrial production growth rates, expected inflation rates, changes in yield spread and residuals respectively. Before running the multiple regression based on Eq. (3), we checked correlations between  $DR\_dummy$  and other macro variables over the full sample period. Among five macro variables, only  $\Delta EINF_t$  was highly correlated with  $DR\_dummy$ . To avoid the possible presence of multicollinearity, we hence carried out two separate multiple regressions with and without the  $\Delta EINF_t$  factor. The regression results are shown in Table 3.

Over the full sample period, the dummy variable of changes in the discount rate  $DR\_dummy$  has a significantly negative impact on hotel returns. The negative coefficient of the  $DR\_dummy$  dummy variable indicates that restrictive monetary conditions were significantly associated with lower hotel stock returns, whereas hotel stocks experienced higher returns in expansive monetary periods. This negative influence remains significant after controlling macro variables are added to the regressions. In sum, the significantly negative reactions of hotel stock returns to the dummy variable  $DR\_dummy$  are consistent with results of the preliminary examination presented in Table 2.

Table 3  
Multiple regression results of hotel stock returns on macro factors

$\Delta MS$	$\Delta UEP$	$\Delta IP$	EINF	SPD	$DR\_dummy$	Adjusted $R^2$
---	---	---	---	---	-4.48 (-1.76)*	0.021
4.90 (1.80)*	-18.80 (-2.85)***	0.17 (1.31)	-2.08 (-1.26)	-0.68 (-0.66)	---	0.075
4.54 (1.60)	-17.01 (-2.72)***	0.11 (0.84)	-1.73 (-1.13)	-0.32 (-1.02)	-4.42 (-2.09)**	0.087
5.12 (1.80)*	-14.75 (-2.43)**	0.05 (0.42)	---	-0.91 (-0.80)	-4.85 (-2.26)**	0.087

Figures in parentheses are Newey and West (1987) corrected *t*-statistics. The data excludes months of changes in the monetary policy. \* Significant at the 10% level. \*\* Significant at the 5% level. \*\*\* Significant at the 1% level.

## Conclusion

Within the hospitality finance literature, a few research papers that investigated the connection between macro forces and hospitality stock returns (Barrows and Naka, 1994; Chen et al., 2005; Chen, 2006a; Chen, 2006b; Chen and Kim, 2006) have pointed out the crucial role of the monetary policy variable in explaining the hotel stock returns. Following this issue, this study examines the Taiwanese hotel stock performance under expansive and restrictive monetary environments.

Different from the previous work (Barrows and Naka, 1994; Chen et al., 2005), which used the money supply growth rates as the monetary policy variable, we employed changes in the discount rate to measure the monetary policy changes and classify the monetary environment as either restrictive or expansive. Under these two different monetary policy regimes, we found that hotel stocks exhibited a higher mean return and lower standard deviation in the expansive monetary environment. The Sharpe ratio of hotel stocks is positive and relatively large during expansive monetary periods, but negative during restrictive monetary periods, showing that even the risk-free asset outperformed the hotel stocks in the restrictive monetary environment.

These evidences suggest that in response to monetary policy developments, hotel stock investors can reallocate their portfolios in a timely manner, i.e. rebalancing their investment portfolios between hotel stocks and risk-free asset according to the monetary policy changes. For example, hotel stock investors should increase their investment holdings in hotel stocks during expansive monetary periods, but invest more on risk-free asset during restrictive monetary periods. The results of regression analyses also support the empirical finding that hotel stocks had higher mean return in expansive periods because of the significantly negative coefficient of the dummy variable of changes in the discount rate, which takes one and zero during restrictive and expansive monetary periods respectively. This finding remains robust after the regressions were carried out with controlling macro variables.

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## Forecasting Models and the Impacts of Intervention Events on Tourism Trends

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### Abstract

The purposes of this paper are to 1) evaluate the accuracy of various forecasting techniques and predict travel trends before and after the inclusion of intervention events, and 2) investigate the intervention impacts on tourist flows. The first task is to focus on the importance for forecasting accuracy of allowing for intervention events in the modeling process. The second task of this study is to measure a set of different intervention events' relative impacts. This study concludes that different categories of intervention events exhibit different impacts upon tourist arrivals.

Key Words: Forecasting models, impacts of Intervention Events

### Introduction

Studies concerned with forecasting the trends integrated with the intervention events are rare in the literature. There is an extensive literature on the implementation of forecasting models, most of these models are applied to international arrivals excluding the impacts of intervention events (Chen, 2005). Several major intervention events pertinent to tourism include health concerns (Carter, 1998), war and political instability (Clements and Georgiou, 1998; Seddighi, Nuttall and Theocharous, 2000), crime (Brunt, Mawby and Hambly, 2000), natural disasters (Faulkner, 2001; Mazzocchi and Montini, 2001), and terrorism (Chen and Chen, 2003). Specifically, such intervention impacts have turned arrivals down suddenly in the directly affected areas and created certain effects in neighboring regions and countries. The purposes of this paper are to 1) evaluate the accuracy of various forecasting techniques and predict travel trends before and after the inclusion of intervention events, and 2) investigate the intervention impacts on tourist flows for a set of different intervention events.

### Methods

The first step is to focus on the importance for forecasting accuracy of allowing for intervention events in the modeling process. The second step of this study is to measure a set of different intervention events' relative impacts. A set of different intervention events selected in the study include Case 1: terrorism (September 11<sup>th</sup>, 2001); Case 2: war and political instability (Iraq, March 2003); Case 3: health concerns (SARS, April 2003); and Case 4 natural disasters (Tsunami, December 2004). The forecasting methods used in this study include (1) Naïve 1, (2) Naïve 2, (3) Holt-Winter's model, (4) Seasonal Autoregressive Integrated Moving Average (SARIMA) model, and (5) Elman's Model of Artificial Neural Networks (ANN). Seasonal autoregressive integrated moving average (SARIMA) models are therefore estimated both with and without intervention effects. A comparison of the out-of-sample forecasts with the actual numbers of tourist arrivals should indicate the crises-induced declines (Chen, 2005).

Data on international arrivals of the receiving countries (Case 1: USA; Case 2: Iraq; Case 3: Hong Kong and China; Case 4: Indonesia, India, and Thailand) and the generating countries of Cases 1 – 4 were obtained from Compendium of Tourism Statistics from the World Tourism Organization (WTO), Pacific Asia Tourism Association (PATA), and the US Bureau of Transportation Statistics. Each of the selected Cases consisted of 14 years of monthly international tourist flows. Forecasts were then generated for the following 12 months, and forecast accuracy was assessed using mean absolute percentage error (MSPE) and root mean square percentage error (RMSPE) (Chen, Bloomfield, and Fu, 2003; Chen, 2005). The construction of the tourist flow forecasting models consisted of three stages: specification, estimation, and evaluation. The specification stage focused on testing, generating, and selecting an appropriate model. The estimation stage used the selected model to predict future visitation. Finally, the evaluation phase investigated various models over time to see if there was any need to modify models and make appropriate adjustments to improve the reliability of estimates.

### *Specifications of Forecasting Models*

Naïve 1. The naïve 1 forecasting method simply states that the forecast value for this period ( $t$ ) is equal to the observed value for the last period ( $t-1$ ) (Makridakis, Wheelwright, & Hyndman, 1998; Chen, 2006).

Naïve 2. The naïve 2 forecast for period  $t$  is obtained by multiplying the current visitor numbers with the growth rate between the previous visitation in time period,  $t-1$ , and the current visitation figures in time period,  $t$  (Newbold & Bos, 1994; Chen, 2006).

**Holt-Winter's Method.** Holt-Winter's three parameter linear and seasonal exponential smoothing model is capable of reducing forecast errors (Winters, 1960; Chen, 2006).

**Elman's Artificial Neural Network (ANN).** Elman's ANN model is a recurrent network. The input to the network for time  $t$  is from the activations in the hidden layer at time  $t-1$ . The reaction of the network to the new input is a function of both the new input and the preceding context. And a compressed trace of all preceding inputs influences each succeeding input (Elman, 1990; Jhee & Lee, 1996; Chen, 2006).

**Seasonal Autoregressive Integrated Moving Average (SARIMA).** The difference between the non-seasonal and seasonal time series is that the non-seasonal relationships are described as those between observations for successive time periods ( $V_t$  and  $V_{t-1}$ ), whereas seasonal relationships are between observations for the same month ( $V_t$  and  $V_{t-12}$ ) or for the same quarter ( $V_t$  and  $V_{t-4}$ ) in successive years. The seasonal autoregressive integrated moving average (SARIMA) model examines the year-to-year relationships for each month or quarter (Box, Jenkins, & Reinsel, 1994; Chen, 2006).

When an external intervention impinges on the time series at time  $t$ , then its impact breaks the series into segments, a pre-intervention and a post-intervention. The form of an intervention model indicates that  $N_t$  (noise component) represents the SARIMA component of a model. The error terms,  $e_t$ , associated with  $N_t$  are assumed to have a zero-mean, constant variance and to be serially independent. When the error terms possess these properties, then the  $e_t$  sequence is a white-noise process (Chen, 2005; Chen, 2006).

*Forecasting Performance: Implication of MAPE and RMSPE (Appendix)*

MAPE and RMSPE were selected to evaluate the performance of forecasting methods. Both MAPE and RMSPE were dominated by one-step out-of-sample forecast errors. The results of MAPE and RMSPE showed the performances of the various forecasting methods for 12-month-ahead forecasting horizons with and without intervention events.

Table 1  
MAPE Evaluations of Forecasting Performances

Model {Estimation Period}: Forecasting Period	Case 1 MAPE	Case 2 MAPE	Case 3 MAPE	Case 4 MAPE
(1) Naïve 1				
{without intervention}: the next 12 months	5.67 (4)	7.86 (4)	9.69 (4)	13.69 (4)
{with intervention}: the next 12 months	17.92 (5)	18.75 (5)	19.82 (5)	21.62 (5)
(2) Naïve 2				
{without intervention}: the next 12 months	13.28 (6)	15.48 (6)	17.34 (6)	21.47 (6)
{with intervention}: the next 12 months	18.82 (6)	20.78 (6)	21.57 (6)	28.93 (6)
(3) Holt-Winter's Method				
{without intervention}: the next 12 months	12.91 (5)	13.65 (5)	14.73 (5)	17.66 (5)
{with intervention}: the next 12 months	11.89(4)	13.69(4)	12.94(4)	15.73(4)
(4) Seasonal Autoregressive Integrated Moving Average (SARIMA)				
{without intervention}: the next 12 months	5.56 (3)	6.36 (3)	8.73 (2)	9.96 (2)
{with intervention}: the next 12 months	4.99 (3)	5.78 (3)	8.11 (3)	7.86 (2)
SARIMA with Intervention Analysis <sup>a</sup>				
{without intervention}: the next 12 months	4.23 (1)	5.16 (1)	7.33 (1)	8.33 (1)
{with intervention}: the next 12 months	3.86 (1)	4.63 (1)	6.31 (1)	6.89 (1)
(5) Artificial Neural Network (ANN) <sup>a</sup>				
{without intervention}: the next 12 months	5.35 (2)	6.48 (2)	8.75 (3)	10.36 (3)
{with intervention}: the next 12 months	4.78 (2)	5.52 (2)	7.64 (2)	8.68 (3)

## Findings

The total impacts of the intervention events on the receiving countries of Cases 1 – 4 have been to cause demand to decrease by approximately 16% - 52% in terms of the number of international tourists over the periods (from the month when the event happened to the end of the used data sets). Overall, there were severe aftershocks on the tourism industry especially in the subsequent three months and the recovery began within 13 months to 24 months after the intervention event month.

The MAPE and RMSPE values revealed that SARIMA was the best among all the techniques when the intervention events were estimated. The MAPE and RMSPE values of the ANN methods were also small. The Naïve 2 model performed worst. When intervention events were not considered, the SARIMA, ANN, and Naïve 1 model still performed well, while the Naïve 2 was still the worst (Tables 1 – 2).

Table 2  
RMSPE Evaluations of Forecasting Performances

Model {Estimation Period}: Forecasting Period	Case 1 RMSPE	Case 2 RMSPE	Case 3 RMSPE	Case 4 RMSPE
(1) Naïve 1				
{without intervention}: the next 12 months	8.86 (4)	9.35 (4)	12.67 (4)	15.17 (4)
{with intervention}: the next 12 months	19.42 (5)	20.55 (5)	21.89 (5)	23.92 (5)
(2) Naïve 2				
{without intervention}: the next 12 months	14.37 (6)	16.88 (6)	19.29 (6)	24.97 (6)
{with intervention}: the next 12 months	20.99 (6)	22.72 (6)	23.56 (6)	29.95 (6)
(3) Holt-Winter's Method				
{without intervention}: the next 12 months	13.92 (5)	15.65 (5)	16.73 (5)	18.66 (5)
{with intervention}: the next 12 months	13.65(4)	15.54(4)	15.91(4)	15.33(4)
(4) Seasonal Autoregressive Integrated Moving Average (SARIMA)				
{without intervention}: the next 12 months	7.86 (3)	8.37 (3)	9.79 (2)	10.86 (2)
{with intervention}: the next 12 months	6.89 (3)	6.48 (2)	8.34 (3)	8.913(2)
SARIMA with Intervention Analysis <sup>a</sup>				
{without intervention}: the next 12 months	5.46 (1)	6.54 (1)	8.76 (1)	9.39 (1)
{with intervention}: the next 12 months	4.89 (1)	5.33 (1)	6.81 (1)	7.83 (1)
(5) Artificial Neural Network (ANN) <sup>a</sup>				
{without intervention}: the next 12 months	6.37 (2)	7.46 (2)	10.73 (3)	11.39 (3)
{with intervention}: the next 12 months	5.88 (2)	6.55 (3)	7.44 (2)	9.78 (3)

Note. Figures in parenthesis denote rankings. For example, based on the examination of the MAPE (Table 1) and RMSPE (Table 2) values, SARIMA (ranked 1) was the best and Naïve 2 (ranked 5) performed worst, when the intervention event was included and the next 12 month forecasts were calculated. <sup>a</sup> = intervention events in the modeling process

### Application of Results and Conclusions

Various intervention events have had significant effects on tourism and hospitality industries among nations. Of these selected events, risks associated with potential terrorism attacks and health concerns are identified as particularly influential in changing travel intentions based on the trends of tourist flows. The analyses within the study generate the trends in arrivals for a set of different intervention events through both intervention analysis and forecasting comparison between forecast and actual arrivals. The substitution action (for example, a holiday in Madeira instead of Thailand) and association process (for example, SARS affects Hong Kong and therefore Canada) are concluded to have potentially predictable characteristics and these related findings can be used to provide insights into the nature of intervention events. The reluctance to fly or travel also had adverse impacts on other sectors of the tourism industry as hotel occupancy rates plummeted, business trips and vacations were cancelled, and workers industry-wide were laid off (Chen, 2005).

This study concludes that different categories of intervention events exhibit different impacts upon arrivals in terms of depth and spread. For future studies, analysts are encouraged to add other associated intervention events to investigate the demand changes including outbreaks of diseases (e.g., Tsunami in 2004 and possible outbreaks in 2005 in the south and southeastern Asian regions), and the economic impacts on particular industry sector (e.g., hurricanes' impacts on the construction industries).

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## APPENDIX

## EQUATIONS OF ERROR MAGNITUDE MEASUREMENT

METHOD/EQUATIONS	DEFINITION
<b>Forecast Error</b>	
$\epsilon_T = A_T - F_T$	$\epsilon$ = the forecast error; $A_t$ = the actual number of visitors in period t; $F_t$ = the forecast value in time period t.
$MAPE = \frac{1}{n} * \sum_{t=1}^n \left( \frac{ e_t }{A_t} \right) * 100$	<b>MEAN ABSOLUTE PERCENTAGE ERROR (MAPE)</b> n = number of time periods; $e_t$ = forecast error in time period t; $A_t$ = actual number of visitors in time period t.
$RMSPE = \sqrt{\frac{\sum_{t=1}^n \left( \frac{e_t}{A_t} \right)^2}{n}} * 100$	<b>ROOT MEAN SQUARE PERCENTAGE ERROR (RMSPE)</b> n = number of time periods; $e_t$ = forecast error in time period t; $A_t$ = actual number of visitors in time period t.

(CHEN, 2006)

## A Study of Developing Destination Loyalty Model: A Structural Approach

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### Abstract

The objective of this study was to offer an integrated approach to understanding destination loyalty and examined the theoretical and empirical evidence on the causal relationships among destination image, tourist satisfaction, and destination loyalty. A research model was proposed and tested using Structural Equation Modeling (SEM). This study employed a causal research design using a cross-sectional sample survey. The target population was all the visitors to Eureka Springs, Arkansas during a two-month survey period. The findings supported that destination image was an antecedent of satisfaction. Satisfaction in turn had a positive influence on destination loyalty.

Key Words: destination image; destination loyalty; tourist satisfaction; attribute satisfaction; Structural Equation Modeling

### Introduction

The link between customer satisfaction and company success has historically been a matter of faith, and numerous satisfaction studies have also supported the case. Customer satisfaction has always been considered an essential business goal because it was assumed that satisfied customers would buy more. However, many companies started to notice a high customer defection despite high satisfaction ratings (Taylor, 1998; Oliver, 1999). This phenomenon prompted a number of scholars (e.g. Jones & Sasser, 1995; Reichheld, 1996; Oliver 1999) to criticize the mere satisfaction studies and call for a paradigm shift to the quest of loyalty as a strategic business goal.

As a result, satisfaction measurement has recently been displaced by the concept of customer loyalty, primarily because loyalty is seen as a better predictor of actual behavior. Loyalty leads to customer retention, which has a direct link to a company's bottom line. Studies have documented that a 5% increase in customer retention can generate a profit growth of 25 – 95% across a range of industries (Reichheld, 1996; Reichheld & Sasser, 1990). In addition, retaining existing customers usually has a much lower associated costs than winning new ones (Fornell & Wernerfelt, 1987), so a larger proportion of the gross profit counts towards the bottom line. Furthermore, loyal customers are more likely to act as free word-of-mouth (WOM) advertising agents that informally bring networks of friends, relatives and other potential consumers to a product/service (Shoemaker & Lewis, 1999). In fact, WOM referrals account for up to 60% of sales to new customers (Reichheld & Sasser, 1990). With such exceptional returns, loyalty becomes a fundamental strategic component for organizations. Therefore, it is time for practitioners and academics to conduct more studies of loyalty in order to have greater knowledge of this concept, to understand the role of customer satisfaction in loyalty, other non-satisfaction determinants of customer loyalty, and their interrelationships.

In the context of travel and tourism, a review of literature reveals an abundance of studies on tourist satisfaction, but destination loyalty has not been thoroughly investigated (Oppermann, 2000). To bridge the gap in the destination loyalty literature, this study offered an integrated approach to understanding destination loyalty and examined the theoretical and empirical evidence on the causal relationships among destination image, tourist satisfaction, and destination loyalty. Although these individual constructs and concepts have received considerable attention in the marketing literature, the conceptual model and empirical studies pertaining to causal relationships among those constructs have not been examined. Hence, the purpose of this analysis was to examine the relationships between the different pairs of variables as a whole, in order to determine the direction and significance of these relationships. The hypothesized structural causal model was tested by structural equation modeling (SEM), which included a test of the overall model as well as individual tests of the relationships among the latent constructs. The empirical investigation was carried out in a major tourism destination in the state of Arkansas – Eureka Springs, which is known as "the Little Switzerland of the Ozarks" and has been attracting people of all ages from all around the country for over 100 years.



## Literature Review

The main purpose of this study was to develop and test a theoretical model, which represented the elements contributing to the building of destination loyalty: destination image, attribute satisfaction, and overall satisfaction. Below is a brief overview of the interrelationships of the constructs in the model.

Destination image affects tourists' subjective perception, consequent behavior and destination choice. Image will influence tourists in the process of choosing a destination, the subsequent evaluation of the trip and in their future intentions (e.g. Chon 1990, 1992; Echtner & Ritchie, 1991; Baloglu and McCleary, 1999a). Destination image exerts a positive influence on satisfaction: more favorable image leads to higher tourist satisfaction (Chon, 1991; Echtner & Ritchie, 1991; Fakeye & Crompton, 1991; Ross, 1993). Destination image also positively affects the behavior intentions of tourists (e.g. Court and Lupton, 1997). Tourists' behavior is expected to be partly conditioned by the image that they have of destinations. The first two hypotheses tested the relationship between destination image and tourist satisfaction:

*H1: Destination image positively influences tourists' overall satisfaction.*

*H2: Destination image positively influences tourists' attribute satisfaction.*

Most early research work concentrated on satisfaction at the global level (e.g. Oliver 1980). Until recently, researchers started to pay attention to attribute-level conceptualization of the antecedents of satisfaction (e. g. Oliver 1993). According to Oliver (1993), overall satisfaction and attribute satisfaction are distinct but related constructs. Attribute satisfaction has significant, positive and direct effects on overall satisfaction; and it capture a significant amount of variation in overall satisfaction (Oliver, 1993; Spreng et. al., 1996; Bolton and Drew, 1991).

Satisfaction research in tourism and recreation has indicated that tourists' satisfaction with individual component of the destination leads to their satisfaction with the overall destination (e.g. Danaher & Arweiler, 1996; Mayer et. al., 1998; Ross & Iso-Ahola, 1991; Hsu, 2003). Overall satisfaction with a hospitality experience is a function of satisfactions with the individual elements/attributes of all the products/services that make up the experience, such as accommodation, weather, natural environment, social environment, etc. (Pizam and Ellis, 1999; Lounsbury and Hoopes, 1985). Therefore, it was postulated that:

*H3: Attribute satisfaction positively influences overall satisfaction.*

A number of marketing studies have confirmed that consumer satisfaction has a significant positive relationship with loyalty/retention (Anderson & Sullivan, 1993; Cronin, Brady & Hunt, 2000; Taylor & Baker, 1994). Satisfied consumers are more likely to continue to purchase, and are more willing to spread positive WOM. It is empirically proved in tourism studies that tourists' satisfaction is a strong indicator of their revisit and referral intentions (e.g. Juaneda 1996; Beeho & Prentice, 1997; Bramwell, 1998; Kozak & Rimmington, 2000; Kozak, 2001). The more satisfied tourists are, the more likely they will return to the same destination, and the more likely they will share their positive traveling experience with their friends and relatives. Therefore, the fourth hypothesis was drawn as:

*H4: Overall satisfaction positively influences destination loyalty.*

To sum up, the following sequence could be established: destination image → tourist satisfaction → destination loyalty. Destination image is an antecedent of satisfaction. Satisfaction in turn has a positive influence on destination loyalty. In an increasingly saturated marketplace, the success of marketing destinations should be guided by a thorough analysis of destination loyalty and its interplay with tourist satisfaction and destination image.

## Methodology

### *Survey Instrument*

This study employed a causal research design using a cross-sectional sample survey. To capture various aspects of the respondents' perceptions of Eureka Springs as a travel destination, a combination of structured and unstructured techniques was used, including a comprehensive review of previous destination literature, content analysis of tourism literature, promotion brochures and websites for Eureka Springs, and the employment of qualitative research techniques such as focus group sessions, unstructured personal interviews and managerial judgment. The final survey questionnaire consisted of the following major sections: questions that measured the following constructs on 7-point likert scale - destination image (53 items), tourists' attribute satisfaction (33 items), overall satisfaction (1 item) and destination loyalty (2 items); and questions designed to gather tourists' demographic information and travel behavior.

### Reliability

A pilot test was conducted to test the internal consistency of the questionnaire items. The first draft of the survey instrument was distributed to 24 randomly selected visitors who stayed at Eureka Springs' hotels and motels. A reliability analysis (Cronbach's alpha) was performed for 'destination image' and 'attribute satisfaction', resulting in robust  $\alpha$  of 0.96 and 0.93, respectively. An alpha of 0.7 or above is considered acceptable as a good indication of reliability (Nunnally & Bernstein, 1994). Based on the results of the pilot test and feedbacks from Eureka Springs Chamber of Commerce, the final version of the survey instrument was developed.

### Sampling Plan

The target population was all the visitors who stopped by Eureka Springs Welcome Center, stayed at hotels, motels, and B&B, and visited souvenir shops / art galleries during a two-month survey period. Confidence interval approach was used to determine the sample size (Burns & Bush, 1995). The formula for obtaining 95% accuracy at the 95% confidence level is:  $n = \frac{z^2(pq)}{e^2} = \frac{1.96^2(0.5*0.5)}{0.05^2} = 385$ ; where:  $z$  = standard error associated with chosen level of

confidence (95%);  $p$  = estimated variability in the population 50%;  $q = (1 - p)$ ;  $e$  = acceptable error  $\pm 5\%$  (desired accuracy 95%). The amount of variability in the population is estimated to be 50%, which is widely used in social research (e.g. National opinion polls in the USA). Assuming a response rate of 50% and an unusable rate of 10%, a total of 963 ( $385/0.4$ ) people were approached to participate in the survey. A two-stage sampling approach was used: proportionate stratified sampling was applied for deciding on the strata sample size, and systematic random sampling (SRS) was used to select the survey participant within each stratum, which involved choosing every  $k^{\text{th}}$  element after a random start.

### Data Analysis

Exploratory factor analysis was employed to derive the underlying dimensions of destination image and visitors' attribute satisfaction. Confirmatory factor analysis (CFA) was applied to confirm the factor structure developed from the exploratory factor analysis (EFA). Structural Equation Modeling (SEM) was used to test the conceptual model that examined the antecedents of destination loyalty.

### **Results**

A total of 345 questionnaires were returned, about 90% of the targeted sample size. The majority (94%) of the respondents were traveling with partners (family and friends), and vacation/leisure was quoted as the major purpose of the trip (79%). One third (33%) of the respondents were first-time visitors. Previous visits (37%) and word-of-mouth (33%) emerged as the two key information sources for respondents to learn about the travel destination.

#### *Underlying Dimensions of 'Destination Image' and 'Attribute Satisfaction'*

The exploratory factor analysis (EFA) was performed to determine the underlying dimensionality of 'destination image' by analyzing patterns of correlations among the 53 image attributes. Principle axis factoring extraction method with oblimin rotation was adopted because the underlying factors were more than likely to be correlated with each other. A range of cut-off criteria were used to determine the number of factors derived, such as eigenvalues, percentage of variance, item communalities, and factor loadings. Items with loadings lower than 0.4 and with loadings higher than 0.4 on more than one factor were eliminated (Hatcher, 1994). A nine-factor solution, with 37 variables being retained, was chosen representing approximately 75.9% of the total variance. The communalities of the 37 variables ranged from 0.45 to 0.90, suggesting that the variances of each original variable (from 45% to 90%) were reasonably explained by the nine-factor solution. Factor loadings of the variables ranged from 0.41 – 0.96. The Cronbach's alpha for the nine factors varied from 0.81 to 0.93, suggesting high internal consistency. The nine factors were labeled based on the core variables that constituted them: travel environment, natural attractions, entertainment and events, historic attractions, travel infrastructure, accessibility, relaxation, outdoor activities, and price and value. Nine composite variables were created and used as indicators for the latent construct 'destination image' in the subsequent SEM.

The same EFA procedure was used to verify the pre-specified dimensions of tourist satisfaction. Seven factors with eigenvalues above 1.0 were generated, which explained about 71% of the total variance. The communalities varied from 0.50 to 0.92, suggesting that the variance in each original variable was reasonably explained by the seven common factors taken together. The factor loadings for the 33 variables ranged from 0.38 to 0.89, above the suggested threshold value of 0.30 for practical and statistical significance. The loadings also presented a clean and highly interpretable solution: the 33 variables loaded significantly on seven factors as the researcher conceptualized - lodging, dining, shopping, attractions, activities and events, environment, and accessibility; no variables loaded significantly on more than one factor. The Cronbach's Alphas for the seven factors were robust, ranging from 0.85 to 0.91, well above the generally agreed upon lower limit of 0.60 for research at exploratory stage (Nunnally, 1979), indicating high internal consistency among the

variables within each factor. Seven summated scales were created and used as manifest variables for the latent variable 'attribute satisfaction' in the subsequent SEM analysis.

#### *Testing the Destination Loyalty Model*

Structural Equation Modeling (SEM) was applied for testing the destination loyalty model, in which four hypotheses were developed based on a comprehensive review of literature. Various measures of overall model goodness-of-fit and measurement model fit suggested the proposed conceptual model were acceptable, particularly considering the attenuation in the fit measures for large models and large sample sizes.

#### Overall Model Fit

Overall model fit depicts the degree to which the specified indicators represent the hypothesized constructs. The  $\chi^2$  value (690.67 with 149 degrees of freedom) has a statistical significance level of 0.0. This statistic failed to support that the differences of the predicted and actual models were non significant. However, it is generally agreed that the chi-square value should be used as a guide rather than an absolute index of fit due to its sensitivity to sample size and model complexity (Anderson & Gerbin, 1984). Thus, other indices should also be assessed. Incremental Fit Measures assess the incremental fit of the model compared to a null model that usually specifies no relation among the constructs and variables. These were the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), and the Normed Fit Index (NFI), which were 0.95, 0.95, and 0.94 respectively. These measures were above the recommended level of 0.90, indicating support for the proposed model. Another measure to assess the model fit is the Root Mean Square Error of Approximation (RMSEA), which provides a measure of fit that adjusts for parsimony by assessing the discrepancy per degree of freedom in the model. The RMSEA value was a marginal 0.11.

Table 1  
LISREL Results for Measurement Model

	Std. Loadings	SMC	CR	AVE
<b>Exogenous: destination image</b>			<b>0.91</b>	<b>0.52</b>
Travel Environment	0.80	0.63		
Natural Attractions	0.70	0.49		
Entertainment and Events	0.76	0.58		
Historic Attractions	0.55	0.30		
Infrastructure	0.73	0.54		
Accessibility	0.72	0.51		
Price and Value	0.81	0.65		
Outdoor Activities	0.72	0.52		
Relaxation	0.68	0.47		
<b>Endogenous: attribute satisfaction</b>			<b>0.91</b>	<b>0.60</b>
Lodging	0.75	0.56		
Attractions	0.84	0.71		
Shopping	0.83	0.69		
Dining	0.75	0.56		
Activities and Events	0.72	0.52		
Accessibility	0.76	0.57		
Environment	0.76	0.58		
<b>Endogenous: destination loyalty</b>			<b>0.90</b>	<b>0.62</b>
Revisit intention	0.84	0.70		
Recommend intention	0.96	0.92		

#### Measurement Model Fit

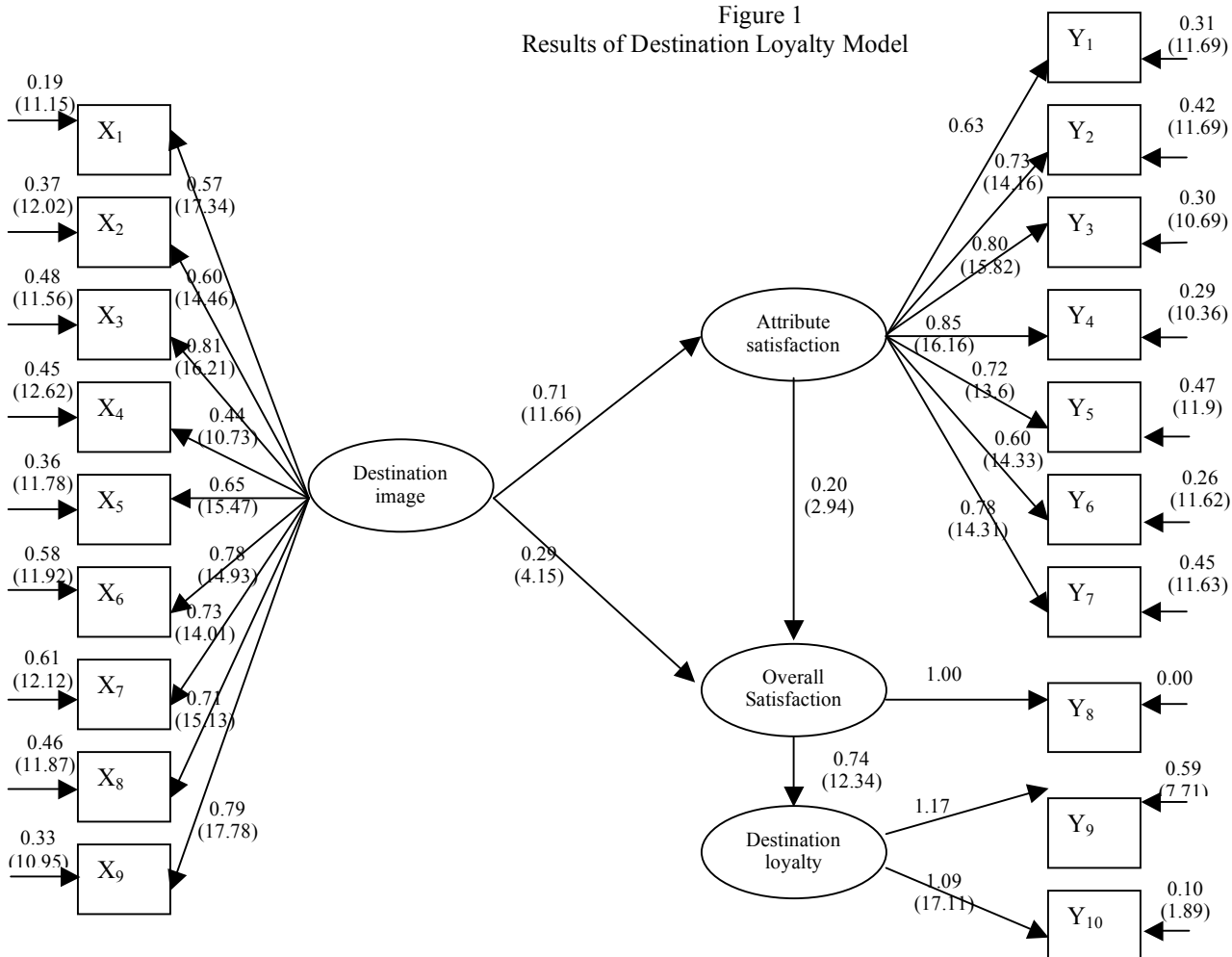
The measurement model provides meaning to the constructs (latent variables) in the model. Proper evaluation of the measurement model is a pre-requisite to the evaluation of the structural model (Anderson and Gerbing, 1982). The convergent validity of the measurement scale was examined via the following tests. First, for each variable the *t* value associated with each of the loadings was significant at the 0.01 level. The results indicated that all variables were

significantly related to their specified constructs, verifying the posited relationships among indicators and constructs. Second, squared multiple correlation coefficients (SMC) for the y- and x-variables were assessed. SMCs lie between 0 and 1 (the closer to 1, the better the variable acts as an indicator of the latent construct). Table 1 revealed that the SMCs for y-variables ranged from 0.52 to 0.92 and for x-variables from 0.30 to 0.65, indicating fairly high reliability (convergent validities) of the measurement model. The construct reliability (CR) and the average variance extracted (AVE) were also computed for the latent constructs. For both CR and AVE, all three constructs surpassed the threshold value of .70 and .50, respectively. Therefore, it can be concluded that the indicators for all three constructs were sufficient in terms of how the measurement model was specified. To examine the discriminant validity of the measurement model, the AVE values for the latent constructs were compared to the squared correlations between the corresponding constructs (Fornell and Larcker, 1981), and none of the squared correlations surpassed the AVE. The above tests indicated that the discriminant validity was upheld for the measurement model.

#### Structural Model Parameters

The most obvious examination of the structural model involves the significance tests for the estimated coefficients (paths), which provide the basis for accepting or rejecting the proposed relationships between latent constructs. The LISREL results (see Figure 1) showed that all the paths proposed in the 'destination loyalty' model were statistically significant and of the appropriate direction (positive): 1) destination image positively influenced attribute satisfaction ( $\gamma_{1,1} = 0.71$ ;  $t = 11.66$ ); 2) destination image also positively influenced overall satisfaction ( $\gamma_{2,1} = 0.29$ ;  $t = 4.15$ ); 3) attribute satisfaction positively affected overall satisfaction ( $\beta_{2,1} = 0.20$ ;  $t = 2.94$ ); and 4) overall satisfaction positively affected

Figure 1  
Results of Destination Loyalty Model



\* X1.....X9: travel environment, natural attractions, entertainment and events, historic attractions, travel infrastructure, accessibility, relaxation, outdoor activities, and price and value

\* Y1.....Y10: lodging, dining, shopping, attractions, activities and events, environment, accessibility, overall satisfaction, revisit intention, referral intention

\* Values in parenthesis are t-statistics (t critical value at 0.05 level = 1.96)

destination loyalty ( $\beta_{3,2} = 0.74$ ;  $t = 12.34$ ). The hypotheses 1 - 4 could not be rejected, which proposed causal relationships among destination image, attribute satisfaction, overall satisfaction and destination loyalty.

The fit of the structural model was also assessed by the SMCs for structural equations, which indicate the amount of variance in each endogenous latent variable accounted for by the antecedent variables in the relevant structural equation. The SMC for 'attribute satisfaction' was 0.51, indicating that 51% of the variance in attribute satisfaction was explained by 'destination image'. About 25% of the uncertainties in 'overall satisfaction' were accounted for by 'destination image' and 'attribute satisfaction' ( $SMC = 0.25$ ). 'Destination image', 'overall satisfaction', and 'attribute satisfaction' explained approximately 44% of the variance in 'Destination loyalty' ( $SMC = 0.44$ ).

## **Implications**

### *Theoretical Implications*

The SEM analysis offered support for the statistically significant relationships between destination image and overall satisfaction ( $H_1$ ), destination image and attribute satisfaction ( $H_2$ ), attribute satisfaction and overall satisfaction ( $H_3$ ), and overall satisfaction and destination loyalty ( $H_4$ ). The destination loyalty model outlined in the conceptual framework was corroborated and all hypotheses proposed held good. Therefore it can be said that tourist overall satisfaction was determined by destination image and attribute satisfaction, and destination loyalty was in turn influenced by overall satisfaction. The findings confirmed that tourists' loyalty was enhanced by positive destination image and high satisfaction, which was consistent with the image  $\rightarrow$  satisfaction  $\rightarrow$  loyalty scheme that conceptually guided this study.

The empirical results of this study provided tenable evidence that the proposed structural equation model designed to consider simultaneously destination image, overall and attribute satisfaction, and destination loyalty was acceptable. Tourism destination loyalty had causal relationships with image and satisfaction. Additionally, the attribute satisfaction separately from the overall satisfaction influenced the destination loyalty. This study makes it clear that destination image plays an essential role in achieving the loyalty of an individual, and tourists' satisfaction must be handled proactively in order to develop it into a lasting relationship beneficial to both parties. Destination image had a positive effect on tourist satisfaction as well as on destination loyalty. An improvement in the overall image of a place held by an individual increased the propensity to make a positive assessment of the stay. It also enhances his or her intention to return and to recommend it in the future. Consequently, with regard to the sequence image  $\rightarrow$  satisfaction  $\rightarrow$  loyalty suggested by the review of the literature, the analysis of the interrelationships as a whole confirmed the model.

In the literature, although it has been acknowledged that destination loyalty is important, little has been done to investigate its measurement, or its structural relationships with image and satisfaction. This study revealed and confirmed the existence of the critical relationships among destination image, attribute/overall satisfaction and destination loyalty. The findings suggested that it would be worthwhile for destination managers to make greater investments in their tourism destination resources, in order to continue to enhance tourists' experiences. It is believed that this study has a substantial capability for generating more precise applications related to destination behavior, especially concerning tourists' loyalty.

### *Managerial Implications*

Destinations today are facing steep competitions and the challenges are getting greater in the years to come. Therefore it is essential to gain a better understanding of why travelers are loyal to a destination and what drives the loyalty. The major findings of this study have significant managerial implications for tourism and hospitality marketers. First of all, the exploratory and confirmatory factor analyses revealed that destination image was consisting of nine latent dimensions, and attribute satisfaction had seven underlying factors. These results could help destination marketers better understand the factors contributing to tourist satisfaction and loyalty so that they are able to carefully deliver appropriate products and services that accommodate tourists' needs and wants. Thus, it is suggested that destination suppliers and managers consider the practical implications of these latent variables, which may be fundamental elements in increasing tourists' overall satisfaction and loyalty.

Furthermore, the SEM findings provided guidance for the success of marketing destinations. First of all, image is shown in this study to be a key factor in the hands of destination managers. It is a direct antecedent of attribute and overall satisfaction as well as a major factor in influencing destination loyalty. Therefore, destination managers must strive to improve the destination image if they are to compete successfully in the competitive holiday market. Adding to the fact that once an image is formed, it is difficult to be changed; it becomes more important for destinations to present the right image and then maintain it. Because the image that tourists hold of a destination will affect tourists' satisfaction with the travel

experiences, the Word-of-mouth communication that takes place after the trips as well as the intention to return in the future, destination marketers should take a serious approach to managing the image. Although it is not possible to control all the elements contributing to the shaping of the image of a destination, it is possible to manipulate some of them such as advertising and promoting tourist attractions, organizing cultural events that appeal to tourists, administering service quality provided by tourism infrastructure such as hotels, restaurants, tourist centers, etc. Since image is modified by each new piece of information or stimulus received by an individual, one's own experience or that of friends, acquaintances or family will help establish more diversified, detailed and realistic image of a destination. Because tourists tend to rely more on this image for satisfaction evaluation and destination choice decisions, all efforts should be aimed at improving that experience. To conclude, tourism destinations must take special care of the image that they attempt to convey and the quality of the services and products that they offer, as these will affect visitors' satisfaction and their intentions for future behavior.

Secondly, destination managers should consider the role tourist satisfaction played in developing destination loyalty. It is intuitively assumed that if tourists are satisfied with their travel experiences, they are more willing to revisit a destination as well as spread positive WOM. This study provided empirical evidence supporting this assumption: satisfaction was found to directly affect destination loyalty in a positive direction. Higher tourist satisfaction will lead to higher destination loyalty, which prompts tourists to visit a destination again and/or recommend the destination to others. Therefore, destination managers should focus on establishing a high tourists' satisfaction level so as to create positive post-purchase tourist behavior and improve/sustain destination competitiveness. Since attribute satisfaction affected destination loyalty through overall satisfaction, its measurement and improvement are critical to destination managers. The special characteristics of tourism determine that many elements are involved in the formation of tourists' satisfaction, from the providers of specific services of accommodation, transport, leisure, among others, to the tourism information offices, the local residents, natural and artificial resources, etc. The situations become even more complicated when a single unpleasant incident leads to a negative overall evaluation, depending on how important the incident is to the tourist. Therefore, in order to achieve a high overall level of satisfaction, it is essential for all those involved to have smooth coordination and co-operation and be fully aware of the critical importance of delivering quality service/product as well as diagnosing the service quality. The appropriate destination products and services should be delivered to tourists in order to enhance destination competitiveness.

#### **Limitations and Future Research Recommendations**

The results presented in this study need to be qualified in light of several limitations. First, the study was conducted in the summer, and thus findings were limited to summer travelers. To overcome this limitation, future researchers could conduct similar surveys in different seasons. The surveys results can then be compared to identify similarities and differences in them. Second, the population of this study was limited to visitors of a tourist destination in the Midwest USA. Therefore, the results from the study may not be generalized beyond this population. Replicating similar studies in other tourist destinations would be imperative for increasing the generalizability of these findings. Lastly, 'destination image', 'attribute satisfaction', and 'overall satisfaction' were studied as antecedents to destination loyalty. There might be additional factors influencing and interacting with tourists' loyalty. Future researchers are advised to investigate additional antecedents of tourist loyalty. This may lead to the uncovering of omissions and misrepresentation of the relationships tested in the current study and to further conceptual refinement and extension.

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## Tourists' Perceived Information Value Structure

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### Abstract

The purposes of this study were to explore information value structure and to examine the relationship between information value and tourists' search behavior for vacation information. To delineate a structure for information value, five information value dimensions were identified. Using the five value dimensions, we proposed four models for information value structure, verified them with confirmatory factor analyses, and finally compared the models to identify the most appropriate underlying structure for tourists' information value. The first-order correlated factor model appeared as the most valid framework for information value structure, which suggested that the five dimensions of information value co-existed and influenced each other. The result clearly indicates that multidimensional information values exist.

Key Words: information value, information search, functional, experiential, utilitarian.

### Introduction

Information that has a direct effect on individuals may have them actively engage in a search for information about a product because individuals with a felt need for information value will be more likely to notice information than those with no such need (Finn, 1984). A variety of ranges or criteria of information value can provide a broader understanding of tourists' behavior. It is assumed in general that the greater the potential influence of an individual's perceived information value in the choice process, the more likely it is that the resulting information value has its effect on information search behavior. To account for the relationship between information value and information search behavior, we suggest that a psychological and motivational approach to unveiling information value should be made on the basis of fundamental and attentional states through information search. In this study, we thus examined the existing multidimensional information value and intended to identify an overall structure for tourists' information value by applying previous theoretical and empirical explanations to the vacation setting. This study also investigated whether information values were significantly related to search behaviors including the type of information search and the extent of information search (i.e., the number of information sources used, the amount of time spent searching for information). Therefore, the purposes of this study are to identify tourists' information value structure and to discover the relationship between information value and information search behavior.

### Theoretical Background and Research Questions

Although "the notion of value in Western thought has proved to be a difficult one, and scholars from a variety of disciplines have attempted to explicate it" (Richins, 1994, p. 504), there is an agreement among scholars that value has a central position and hence directs attitudes and behavior regarding specific objects or situations (Kamakura & Novak, 1992). Consumer behavior studies often adhere to Rokeach's (1973) definition of value as "an enduring belief that a specific mode of conduct (i.e., instrumental value) or end-state (i.e., terminal value) is personally or socially preferable to an opposite or converse mode of conduct or end-state" (p. 5). Values are fundamentally embedded in individuals' desirability: individuals seek for value through information reflecting their generic sense in preconsumption experience as well as comparative valuation of the evaluative criteria of alternatives. Logically, information value entails the expected product consequences that contribute to the capacity of a purchase choice. Punj and Staelin (1983) state that "the ultimate goal of external search is to obtain tangible consumer benefits, such as more value for their money and overall satisfaction with the product" (p. 369). Functional information value on utility-based factors such as economic value, product attributes, and security is helpful for coping with uncertain situations at the destination in addition to assisting the purchase decision. Further, individuals are more inclined to perceptions attuned to amorphous and elusive values than rational properties of task environments in the choice process (Yeung & Wyer, 2004). At the preconsumption, vicarious consumption can result from browsing information and in generating experiential pleasures (Hirschman, 1980). Otto and Ritchie (1996) provide experiential benefit, which evokes an emotional response and arouses affective reactions in tourists (e.g., the physical attractiveness of a resort, the tranquil beauty of mountains).

First, utilitarian information is appropriate to specific situations relating to particular individual goals. People use utilitarian information to solve some of their purchasing problems and to help achieve the desired outcomes. Thus,



utilitarian value has been defined as useful, beneficial, and relevantly detailed (Babin, Darden, & Griffin, 1994; Batra & Ahtola, 1990; Hirschman, 1986). Secondly, individuals may often reduce their anxiety by searching for information and then make a decision with confidence. It has been postulated that information search is adopted as a risk-handling strategy (Dowling & Staelin, 1994). A number of studies have developed risk dimensions to measure how consumers or tourists perceive and evaluate risks (Roehl & Fesenmaier, 1992; Sönmez & Graefe, 1998). Third, multisensory experiences through the features of hedonic travel-related information are generally described as abstract, subjectively and uniquely experienced, non-utilitarian, emotional and holistic, along with the evocation stage such as an appreciation of ineffable beauty (Hirschman, 1983). Those possessing a strong hedonic desire will search for ways to satisfy their needs and elicit pleasure and excitement while searching and processing information (Vogt & Fesenmaier, 1998; Yeung & Wyer, 2004). Furthermore, sensation seeking is defined as the need for “varied, novel, and complex sensations and experiences ...” (Zuckerman, 1979, p. 10) and the willingness to take physical, social, legal and financial risks for the sake of such experience (Arnett, 1994). In tourism studies, the degree of novelty sought and the type of tourist (as proxies for sensation seeking) are found to be related to the kinds of information sources consulted and the number of media sources used (Gilchrist, Povey, Dickinson, & Povey, 1995). Finally, individuals within the social context are more likely to rest on information from opinion leaders or personal sources rather than commercial communication channels or mass media (Hirschman & Wallendorf, 1982). The need for social-based information can be partly explained by “signs,” which contribute to the inclination to seek experiences to enhance one’s identification or to self-construct through social interactions (Dimanche & Samdahl, 1994).

In summary, the involvement of functional value occurs when tourists process cognitive attributes-based evaluations (Baloglu, 1999). The more consumers appraise the experiential value of information, the more expressive the intangible attributes and the more evocative the sensory experiences (Baloglu, 1999; Cees, 2000). Hence, perceived information value is multiply determined and multidimensional. A need for value can be triggered by internal stimuli or external stimuli, and propels the process of decision-making through a search for information on alternative values. Individuals’ internal stimuli are driven by their physiological or cognitive disposition, while external stimuli come from situational responses such as physical product or informational cues (Kotler & Armstrong, 1999).

Research Question 1: How are information value dimensions structured?

This question attempts to verify a structure for multidimensional information values to provide the salient value consciousness in the broader vision and a sense of what knowing the individual tourist may entail in gleaning information based on a cohesive conceptual framework (Hirschman & Solomon, 1984; Vogt & Fesenmaier, 1998).

Research Question 2: Are information values related to search behavior including the type of information sources used and the extent of information search (i.e., number of information sources used and amount of time spent searching)?

Individuals may seek specific information or use certain information sources in an attempt to place themselves in preferred states of being or to pursue their value. Tourists who not only desire excitement (i.e., hedonic) but also perceive risk have a tendency to use a variety of information sources (Gitelson & Crompton, 1983; Locander & Hermann, 1979; Roehl & Fesenmaier, 1992; Sönmez & Graefe, 1998).

## **Methodology**

### *Instrumentation*

The literature upon which each dimension has been developed is analyzed to develop a theoretical base. Accordingly, the measurement of information value dimensions, as the first part of the questionnaire, consists of 16 items following the statement: “How important is it that the information you review ...?” The second section included questions regarding information search behavior. That is, the number of sources used was decided by calculating the total number of sources used: 4 “used somewhat” to 7 “a lot” on the Likert scale. The amount of time spent searching for information was obtained by an open-ended question.

### *Sample*

A self-administered questionnaire was mailed to 900 individuals who were drawn systematically from the lists of people provided by a firm managing three resorts in Florida. Among 410 received responses, 189 respondents indicated that they had not searched for information when booking the resort. The remaining 221 that searched for information were used for the data analyses of this study. Over half of the respondents were female (62%), 30-49 years of age (63%) and well

educated. The most respondents had graduated college or completed graduate work (77%). The majority (83%) of the respondents answered US\$80,000 or more as their annual household income.

### Models and Analyses

To verify the structure for information value as in the study objectives, we proposed four models utilizing five information value dimensions identified in the literature review process: 1) first-order correlated factor model, 2) first-order uncorrelated factor model, 3) second-order two factor model, and 4) second-order single factor model. The first model hypothesizes that the five first-order factors are correlated to each other, which indicates that the five dimensions of information value co-exist by influencing each other. The second model hypothesizes that the same five factors exist independently. The third model is developed based on the notion that the five value dimensions are related to 'functional value' and 'experiential value' as explained in the earlier section. Thus, it is hypothesized that the five first-order factors can be grouped with a link to one of two second-order values: 'functional' and 'experiential.' The fourth model hypothesizes that the five factors exist under the sole influence of a second-order single factor, named 'information value.' The fourth model also assumes that the second-order factor (information value) exists but cannot be directly measured and can be only inferred from the first-order value factors. To verify the proposed four structures, confirmatory factor analyses were conducted using the correlation matrix and maximum likelihood estimation as implemented in LISREL 8.0. The other main objective was to see if there are potential links of information value to information search behavior.

### Study Results

Four proposed models for information value structure were tested with confirmatory factor analysis (CFA) in which each of the value measurement items was loaded on its a-priori factor. Regarding the good ness of fit of the first model, the model fit indices indicated an adequate degree of model fit ( $\chi^2_{(94)} = 114.0$ ,  $p < 0.05$ ,  $\chi^2 / d.f. = 1.21$ , Normed Fit Index (NFI) = 0.919, Goodness-of-fit index (GFI) = 0.941, Adjusted goodness-of-fit index (AGFI) = 0.901, and Root Mean Square Error of Approximation (RMSEA) = 0.045). The  $\chi^2 / d.f.$  ratio and RMSEA were below their acceptable threshold, 2 to 3 and 0.08 respectively. The NFI, GFI, and AGFI were all above the desired hurdle of 0.90 (Hair, Anderson, Tatham, & Black, 1998). Overall, it could be said that the model fits the data well.

Convergent validity was then evaluated in the CFA model by checking if each factor loading ( $\lambda$ ) was significant. All the loadings were greater than 0.61 and significant at an alpha level of 0.01. In addition, Average Variances Extracted (AVEs) of all five dimensions exceeded the 0.5 threshold (Fornell & Larcker, 1981), suggesting evidence of acceptable convergent validity. Discriminant validity among the proposed factors was examined. AVE of each factor was compared to the square of the highest estimated correlation among each possible pair of dimensions. For example, the lowest AVE is 0.510 at the hedonic factor. The highest estimated correlation between the hedonic factor and any other factors (sensation seeking) is 0.602. The square of the correlation is 0.362, which is lower than the AVE of the hedonic factor. This suggests that variance extracted by measurement items within the hedonic dimension is greater than variance shared or explained by any other proposed dimensions. All the AVEs are found to be greater than any squared correlations, providing evidence of discriminant validity.

Table 1  
Goodness-of-fit Indices for Alternative Models

Goodness of Fit Indices	Model 1 (First-order correlated factor model)	Model 2 (First-order uncorrelated factor model)	Model 3 (Second-order two factor model)	Model 4 (Second-order single factor model)
Chi-square (df)	114.0 (94)	401.8 (105)	204.7 (98)	121.9 (95)
Chi-square/ df	1.21	3.83	2.09	1.28
Normed fit index (NFI)	.919	.713	.854	.913
Goodness-of-fit index (GFI)	.941	.789	.893	.936
Adjusted goodness-of-fit index (AGFI)	.901	.682	.825	.896
Root Mean Square Error of Approximation (RMSEA)	.045	.125	.082	.047

Overall, the analyses show that model 1 (first-order correlated factor model) is acceptable. The result indicates that the hypothesized five information value dimensions are robust and the correlated structure of the five dimensions is valid. The difference between Model 1 and Model 2 is in the orthogonal nature of the proposed value dimensions. Model 2 hypothesized that the 16 measurement items form into 5 orthogonal, or uncorrelated first-order dimensions, which means that the five information value dimensions exist in a totally separate, or independent form. The model was tested with CFA as well. The chi-square for the model was 401.8 (d.f.= 105,  $p < 0.01$ ), and the RMSEA was 0.125. The NFI, GFI, and AGFI were 0.713, 0.789, and 0.682 respectively. As evidenced by the changes in the indices, the model 2 has substantial

deterioration when compared to Model 1, providing unsatisfactory solutions. In addition, we compared models 1 and 2 by examining the difference in chi-square values. The difference was significantly large ( $\Delta\chi^2(11) = 287.8(11)$ ,  $p < 0.01$ ). Thus, it was determined that model 2 is unsatisfactory and unacceptable. Model 3, hypothesized that the five first-order factors loaded on one of the two correlated second-order factors (functional and experiential values), was also tested by CFA. Even though all first-order factors loaded significantly on the second-order factor ( $p < 0.01$ ), the model indices associated with model 3 were unsatisfactory ( $\chi^2(98) = 204.7$ , NFI = 0.854, GFI = 0.893, AGFI = 0.825, RMSEA = 0.082), suggesting a not-good-fit model. Additionally, a comparison of the fit statistics for models 3 and 1 showed that model 3 had significant deterioration in model fit over model 1. The chi-square difference was significantly large ( $\Delta\chi^2(4) = 90.7$ ,  $p < 0.01$ ), and thus model 3 was rejected. Although discriminant validity was verified, it is still noted that significantly positive correlations existed among all 5 factors, suggesting high degrees of empirical overlap. That is, respondents who held great perceptions of any one dimension of information value also tended to greatly perceive the other dimensions. Thus, we tested the possibility of the five dimensions to form a second-order single factor. CFA results suggest that most indices are satisfactory ( $\chi^2(95) = 121.9$ , NFI = 0.913, GFI = 0.936, RMSEA = 0.047), except for AGFI (0.896), so model 4 is deemed reasonably acceptable. However, when compared to model 1 by examining chi-square values, the difference was significant ( $\Delta\chi^2(1) = 7.9$ ,  $p < 0.01$ ), indicating model 1 has substantial improvement over model 4. In sum, model 4 is acceptable, but model 1 is the better model. Therefore, considering the results of all the analyses, we could determine that out of the four proposed models, model 1 best represents information value structure.

Table 2  
Model Comparisons

Model Comparison	$\Delta\chi^2$ (Ad.f.)	p-value
Model 2 – Model 1	287.8 (11)	< 0.01
Model 3 – Model 1	90.7 (4)	< 0.01
Model 4 – Model 1	7.9 (1)	< 0.01

A series of regression analyses were performed to examine whether information values were related to the type of information sources used. Utilitarian information value was significantly associated with the Internet ( $\beta = .29$ ,  $p < .01$ ). And, risk-avoidance information value was significantly related to the use of mass media such as magazines ( $\beta = .24$ ,  $p < .01$ ) and newspapers ( $\beta = .17$ ,  $p < .05$ ), while social information value was significantly related to information from friends and relatives ( $\beta = .22$ ,  $p < .01$ ) as well as use of brochures/pamphlets ( $\beta = .22$ ,  $p < .01$ ). Information from reference groups is considered to be one of the most popular social sources, as it is interpersonally circulated or distributed via easily accessible social contacts or within social interactions. Risk-avoidance information value was positively related to the use of magazines and newspapers, which can provide a broad range of information on the risk of destinations. Based on the results of the study on the Internet functionality of travel by Kristiansen (1998), the highest rank of information search through the Internet is for booking and availability followed by price check.

In regard to the extent of information search, only risk-avoidance information value was significantly and positively related to the number of information sources used ( $\beta = .24$ ,  $p < .01$ ). Further, there was the significant and positive relationship between social information value and the amount of time spent searching for information. As social information value is perceived more, individuals are more likely to engage in searching for information ( $\beta = .20$ ,  $p < .01$ ). The finding that risk-avoidance information is closely associated with increased number of sources is consistent with Locander and Hermann's (1979) work. They find that individuals who perceive increasing risk significantly more use information and, ultimately, feel more self-confident. Thus, it is logical to expect that tourists would be inclined to use various sources of information in an effort to reduce their perceived risk (Roehl & Fesenmaier, 1992; Sönmez & Graefe, 1998).

## Discussion and Conclusions

Four plausible alternative models for information value structures were proposed and tested using confirmatory factor analyses (CFA). The results indicated that model 1 (first-order correlated factor model) represented the most valid framework for information value. Although the information value structure was best represented by Model 1, Model 4 should not be rejected. This may suggest that information value can collectively represent the five identified value dimensions. It is also worth noting the meaning of high correlations among the five value dimensions. For example, the strongest correlation was found between sensation seeking and utilitarian ( $\Phi = 0.686$ ), and means that vacationers' perception of sensation seeking value is transferable to their perception of how utilitarian the information value is for their vacation booking decisions. Another possible explanation is that sensation-seeking information may be sought in an effort to enhance seekers' performance or problem-solving (Hirschman, 1980). Thus, it is expected that tourists who seek sensational experiences will search for utilitarian value of information. Also, sensation seeking was found closely correlated to hedonic value ( $\Phi = 0.602$ ), with its imagery and projective consumption (Hirschman & Holbrook, 1982;

Zuckerman, 1979), although sensation seeking deals with more dangerous or unusual activities, novelty and intense stimulation than hedonism (Arnett, 1994; Zuckerman, 1979). The multi-dimensional approach to information value should allow vacation and resort marketers to identify specific areas of information value that need attention to improve vacationers' information search and facilitate their subsequent decision making. Apparently, individuals who are conscious of which information is worthwhile are more responsive to sources which best gratify their perceived value. Thus, destination marketers need to pay more attention to the development and promotion of external sources in accord with the information value that their target market perceives.

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## Travel-Related Information Value and Search Behavior

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### Abstract

The study focuses on the impacts of perceived information value, level of information sources used, and level of information access on received information value. It attempts (1) to identify whether perceived information value is composed of utilitarian function and experiential pleasure and (2) to determine whether perceived information value, level of information sources used, and information access influence the received information value gained from information performance and consequences. The theoretical and managerial applications of this research are discussed.

Key Words: information value, information access, information search behavior.

### Introduction

As travel offerings have become more information intensive, travel information provided has dramatically increased in quantity and improved in quality. Consequently, people search more information than they need. Information search is considered to be the act of fulfilling a variety of values that an individual pursues in seeking available alternatives of a given product or service. If information leads to the desired value, information acceptance may be high and, as a result, increases the individual's subjective probability of purchasing the product or service (Kristin & Zauberman, 2005). The ample evidence of previous studies on perceived information value (e.g., Chen & Dubinsky, 2003; Zeithaml, 1988) shows that received information value is critical to tourist satisfaction as well as to tourism promotion. Information value can be obtained overall in a situation of using information through information consequences. Within this perspective, the challenge is how tourists receive information value and how their reaction to information value influences their attitudes and behavior. Information value has evolved from the viewpoint of multiple criteria, based on the process of information search (Batra & Ahtola, 1990; Holbrook & Hirschman, 1982). Holbrook and Hirschman (1982) suggest experiential perspectives of consumption such as hedonic, aesthetic, and symbolic aspects, while Batra and Ahtola (1990) categorize consumption experience into utilitarian and hedonic components. Further, Sheth, Newman and Gross (1991) suggest five value dimensions—social, emotional, functional, epistemic, and conditional value—with regard to a choice.

The goal of this research therefore is to develop a conceptual framework of information value, information search behavior, and attitudes toward information. Specifically, the objectives of the study are to identify the constructs composed of perceived information value and to determine whether perceived information value, level of information sources used, and information access influence the received information value gained from information performance and consequences.

### Perceived Information Value

Information value entails expected product consequences which contribute to purchase choice. People navigate information and use it to envision themselves experiencing a product before they purchase it (Schlosser, 2003). Information value may rely on meaningful consumption experience and may be expressed as individual meaning differences (Woodruff, 1997). Information value in the context of tourism is assumed to deposit the conditions in which the role of information takes place because information plays a critical role in predicting purchase and consumption behavior (i.e., travel behavior) at a destination (Stewart & Vogt, 1999). That is, individuals may seek for value through information reflecting their generic sense in the consumption experience as well as comparative valuation of conditions where they have to choose between alternatives (Holbrook, 1994). The valenced information experience may be related to what information value is expected and received during travel. The benefits from information may be associated with product attributes but depend on what is gained through information search. For example, information search relevant to the purposed task can be undertaken by both utilitarian functions and intrinsic rewards, such as fun and pleasure (Pham, 1998). The criteria of information value can be developed within the overall context of the preconsumption and expected product value since "consumption activities or usage behaviors are the grounds for value-producing services on which purchasing decisions [i.e., information search process] depend" (Holbrook, 1994, p. 39). Perceived information value is internally predisposed toward the nature of an individual's information as well as is externally pursued for the benefits of information. Information is important to enhance utility in destination-related choices about lodging, transportation, sights and activities (Snepenger, Meged, Snelling, & Worrall, 1990). Utilitarian information value weights functional capabilities which are representative of task-

related attributes such as good deals or benefits. Task-related information search in the decision making process is instrumental and informative (Stewart & Vogt, 1999). Specifically, the role of utilitarian function is to maximize positive rewards and to minimize any negative outcomes through searching (Katz, 1960). In other words, utilitarian information value may serve “to reach the desired goal [i.e., task completion] or avoid the undesirable one [i.e., problem-solving]” (Katz, 1960, p. 170). That is, people may expect a better decision outcome and benefit through information searching.

On the other hand, information search reflects a tendency to enjoy navigating and browsing information as a recreational activity (Hoffman & Novak, 1996). The process of information search involves options with experiential pleasure of information. Experiential information is linked to an individual’s emotional intermediate (Joy & Sherry, 2003; Schlosser, 2003) and sought in an affective state such as certain preconsumption episodes or “flow” experiences (Pham, 1998). For instance, pictorial presentations such as brochures, video and the Internet are used to deliver imaginative desirability as well as aesthetic value of a destination. Since individuals tend to engage in self-relevant and preferable consumption experiences, experiential information searching may stimulate the mind and senses or enhance positive emotions in terms of fun or play. Thus, information value comprehends affective interactions based on pleasurable responses to enhance experiential value as well as cognitive criteria such as utility to generate benefits (Bojanic 1996; Petrick, 2002; Zeithaml, 1988).

### **Received Information Value**

To understand information value in the existing consumer and tourist literature, it is necessary to distinguish two levels, phenomenological awareness and the processed outcome. The former is related to an individual’s awareness of desirability in information search, while the latter involves information outcomes from information operation. Delving deeper into discussions of information value concept reveals substantive differences between perceived and received information value. One difference lies in the way that the value of information is defined according to situation. Perceived information value is pursued in order to gain utility and benefits, or information experience in itself, whereas received information value is decided by evaluating whether information value is received or not. Individuals may evaluate information value differently between the stages of pre-trip preparation and during trip experience. The theoretical difference between perceived value and received value appears to be quite slight, but obviously exists. Woodruff (1997) explains the transformation process of information value from the choice process to the consumption situation: “During the choice task, customers may predict received value [i.e., perceived value of a product], but during use they actually experience received value” (p. 142). In other words, information value is widely conceived as favorable attributes-based desires prior to travel, while the selective criteria of information value at a destination is centered on performance or consequences of the information.

### **Level of Information Sources Used and Information Access**

The function of information is particularly pertinent to an easy information approach, or spending less time and effort to gain relevant information needed. Increased accessibility to information can make travelers to collect selective and relevant information more easily. According to Mohr and Sohi (1995), people tend to consider the access to large amounts of information as producing a higher quality of information because good decisions are basically attributed to a greater amount of information or more frequent access to information. It is not always possible, however, to acquire the information that people need, though information is extensively and affluently distributed everywhere. Only accessible information provides a channel through which useful benefits and desired experiences are gained. Accessibility to certain product-related information is important to gain high quality information and leads to more persuasive effects of external information search, influencing stimulus-based choice (Mandel & Johnson, 2002). If the initial information is highly accessible at the time of encountering a novel or unfamiliar destination, it is likely to facilitate the process of persuasion and reconciliation (Sengupta & Johar, 2002).

### **Methodology**

#### *Sampling Design and Data Collection Procedure*

Data for this study were collected in the spring of 2004 from foreign visitors to the travel information center of the Korean Tourism Organization in Seoul and two travel information kiosks operated by the Seoul City Hall. A random sampling scheme was used to select respondents during the open hours of the travel information center from Monday to Friday of the week. Visitors completed a questionnaire on site during their visit. The respondents completing the questionnaires were given small gifts in appreciation for participating in the study.

#### *Instrumentation*

The survey instrument was a self-administered questionnaire consisting of four sections. The first section focused on individuals’ information search behavior. Using a seven-point Likert scale ranging from 1, “not at all” to 7, “a lot,” they

indicated their usage of the eight sources. The amount of time spent in searching for information was measured through categories. In the second section of the questionnaire, respondents were asked to indicate the perceived value of information they reviewed prior to the current travel. Based on the literature review, specifically the work of Batra & Ahtola (1990), Hirschman (1986), Hirschman & Solomon (1984), Mano & Oliver (1993), Mittal & Lee (1989), and Vogt & Fesenmaier (1998), two sub-constructs were modified to more adequately reflect travel-related information value. All items were measured using a 7-point Likert scale ranging from 1, "not at all important" to 7, "very important." In a separate section, received information value was divided into two categories, information performance (i.e., helpful, confirmable) and information consequences (i.e., important, satisfactory, valuable). Each information source was rated, using a 7-point semantic differential scale. The final section of the questionnaire included questions on individuals' socio-demographic characteristics including gender, age, education, and income.

### *Data Analysis*

Data analysis for this study involved the following four steps. First, descriptive statistics were computed to profile respondents. This step was followed by reliability testing, factor analysis, correlation analyses, and multiple regression analyses. Reliability testing and factor analysis were employed to determine the underlying dimensions of perceived information value. Correlation and multiple regressions analyses were used to assess the relationships among perceived and received information, level of each information source used and information access.

### **Study Results**

About 500 questionnaires were distributed, and a total of 259 individuals completed the questionnaire (response rate = 52%). According to Goeldner & Ritchie (2002), tourists are defined as individuals traveling within 12 months. Thus, 26 questionnaires were excluded because the respondents who stayed over a year were not considered as a tourist. A total of 233 respondents' answers were utilized in the data analysis.

Approximately 51% of the respondents were male. The largest percentage of respondents was from Japan (33.6%), 20-29 years of age (48.5%) and well educated (62.3% had graduated college or completed graduate work). In addition, 62% of the respondents reported that annual household incomes were less than US\$40,000. Of the 233 individuals who searched for information prior to their vacation, nearly 55% reported that they had less than a month and 12% began searching more than four months ahead. Respondents were asked to indicate how often they used 7 different information sources prior to their vacation. Respondents were more likely to indicate that they used the Internet ( $x=4.87$ ) or that they relied on guide books ( $x=4.69$ ), followed by friends or relatives ( $x=4.11$ ) and brochures/pamphlets ( $x=3.80$ ). They were least likely to use travel agencies ( $x=2.51$ ). The number of sources used was coded by calculating an overall number based on the total number of sources assigned to 4 to 7 (i.e., used somewhat to a lot) on the Likert scale. The majority (71%) of the respondents used between two and five sources.

### *Perceived information value construct*

Information that provides facts about desirable places to visit was considered most important to respondents (mean=5.06, sd=1.39), while information about entertainment was considered to be least important (mean=4.35, sd=1.47). In an effort to reduce the thirteen items of perceived information value into underlying dimensions, factor analysis was employed. Using .50 as the cut-off for the factor loadings, two distinct dimensions were observed. The reliability of each dimension was assessed with Cronbach coefficient alpha values which ranged from .81 to .89. The first factor, "Utilitarian function," included a statement related to hedonic value and seven statements that directly focused on utilitarian function. It had an eigenvalue of 4.20 and explained 35% of the overall variance. The other factor labeled, "Experiential pleasure," consisted of five statements, three of which were tied to experiential value and two statements that could not only belong to utility but also improve the quality of travel experience. It explained 25% of the overall variance with an eigenvalue of 3.04.

### *Perceived information value and received information value of sources used*

A series of hierarchical regression analyses were conducted to determine whether perceived information value was related to received information value (i.e., information performance and information consequences) of each information source used. In addition, the level of each information source used and information access were investigated in the model. All independent variables were entered into the model in order of theoretical importance of inner influence on tourists' information search behavior: perceived information value followed by level of each information source used, information access, and each interaction of variables. The results showed that two dimensions of perceived information value (i.e., experiential pleasure, utilitarian function) accounted for very little of the variance of the received information value. At the first step, the performance of friend and relatives ( $R^2_{adj}=.02$ ,  $p=.05$ ) and guide books ( $R^2_{adj}=.04$ ,  $p=.01$ ) was significantly and positively related to utilitarian function. The performance ( $R^2_{adj}=.04$ ,  $p=.01$ ) and consequences ( $R^2_{adj}=.05$ ,  $p=.01$ ) of travel agencies were significantly and negatively related to experiential pleasure. At the second step, the level of each



information source used and information access were entered. Information access contributed an increase in the variance in the received information value. The variance in all six information sources was significantly increased from a low of .56 to a high of .83. The level of each information source used was significantly and positively related to the performance of guide books ( $R^2_{adj}=.79$ ,  $p=.01$ ), pamphlets/brochures ( $R^2_{adj}=.69$ ,  $p=.01$ ), the Internet ( $R^2_{adj}=.83$ ,  $p=.01$ ), and mass media ( $R^2_{adj}=.17$ ,  $p=.01$ ), while it was also related to the consequences of mass media ( $R^2_{adj}=.59$ ,  $p=.01$ ). As for the interactions among variables, only level of information source used was significant in explaining the variance in the usage of pamphlets/brochures ( $R^2_{adj}=.68$ ,  $p=.05$ ).

#### *Perceived information value and extent of information search*

A series of hierarchical regression analyses was also performed to determine whether perceived information, level of each information source used and the interaction of these two constructs influence the extent of information search (i.e., the amount of time spent searching for information and the number of information sources used). In an effort to control the influence of perceived information value, experiential pleasure and utilitarian function were entered in the first step. A small portion of the variance of the extent of search was explained by perceived information value. Utilitarian function was significantly and positively related to the amount of time spent in searching for information ( $R^2_{adj}=.07$ ,  $p=.01$ ), whereas experiential pleasure significantly and positively related to the number of information sources used ( $R^2_{adj}=.11$ ,  $p=.01$ ). By adding the level of each information source used in the second step, the variance in the number of information sources highly increased ( $R^2\Delta=.61$ ,  $p=.01$ ), while the variance in the amount of time spent searching for information slightly increased ( $R^2\Delta=.08$ ,  $p=.01$ ). Guide books and the Internet were significantly and positively related to the amount of time spent in searching for information. Experiential pleasure was positively related, while utilitarian function was negatively related to the number of sources used. Further, all information sources except friends and relatives were found to be significantly related to the number of information sources used. There was no significant relationship between each interaction of variables and the extent of information search (the amount of time spent searching for information and the number of information sources used).

#### **Conclusions**

The results of this study provide evidence that, in the context of travel and tourism, information value does influence individuals' searching for travel information. Identifying and providing information values are increasingly important to the emerging competitive destinations. Understanding the significance of the role of information value starts with findings that perceived information value is linked to tourists' received information value. Previous research supports the part of the findings in this study that perceived information value is identified as utilitarian function and experiential pleasure (Batra & Ahtola, 1990; Hirschman & Solomon, 1984; Mittal & Lee, 1989). Of interest is the fact that some utilitarian functions (i.e., beneficial in making choices and connected to other information) are included in the experiential value. It can be assumed that experiential information value is regarded as fulfilling a variety of needs and should be helpful in making choices and decisions. The results indicate that information access has a strong impact on the received information value of all sources. In fact, the easy access to information is the initial issue of information performance (Mandel & Johnson, 2002; Mohr & Sohi, 1995). In addition, as the use of pamphlets/brochures, guide books, the Internet, and mass media as sources of travel information increased, the performance of information went up. Those sources of information may be considered as ongoing information sources that people can utilize without a specific purchase plan. Hence travel information should be available to people whether dependent or independent of any recognized purchase plan. This study also found that the interaction of utilitarian function and information access was negatively related to the consequences of pamphlets/brochures. It can be argued that pamphlets/brochures do not contain enough functional information. However, the use of pamphlets/brochures led to consequences. The last research question focused on the impact of perceived information value and sources on the extent of information search. When the combined effects of perceived information value and level of sources used were accounted for, they did not contribute to explaining the amount of time spent in searching for information and the number of sources used. However, the results concluded that tourists were more likely to engage in using guide books and the Internet. Those who obtained information from external sources except friends and relatives were more likely to utilize various sources of information. Tourists tend to gain information through a variety of promotional marketing sources (Stewart & Vogt, 1999). The findings of this study will be critical to marketers who must introduce promotional campaigns and create touristic products, because tourists' information search has been considered to increase with positive attitudes toward the destination (Vogt & Fesenmaier, 1998). With respect to perceived information value and the number of information sources used, the results were unexpected. For example, experiential pleasure through information search is considered as an ongoing search (Hoffman & Novak, 1996), whereas utilitarian function is sought only when expected benefits exceed perceived costs (Srinivasan & Ratchford, 1991).

To extend the research on tourists' information search behavior, suggestions for future research and limitations are stated. Numerous variables can affect the process of tourists' information search. Thus, some factors that theoretically influence individuals' search behavior should be explored as different stages of choice. It is also recommended that a

replication of this study be conducted with different types of tourists and/or destinations to verify the generalizability of the results. It is possible that individuals traveling to a domestic destination, for example, may have different perceptions of perceived and received values of information as well as information search behavior.

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## Looking at the Big Picture: A Multidimensional Framework for Assessing Today's Hospitality Graduate Education

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### Abstract

Although the number of U.S. hospitality graduate programs has increased over the past two decades, a limited number of research studies have addressed how hospitality graduate education is perceived by its stakeholders: students, educators, and employers. This study offers a multidimensional framework to assess the status quo of hospitality graduate education in terms of curriculum design. Hospitality graduate education was examined through three perceptual dimensions; the hospitality industry professionals, educators, and students. The results confirm several significant gaps and intriguing differences among the stakeholders' perceptions of graduate education in hospitality. Implications of these important and potentially controversial findings are discussed.

Key Words: Hospitality Graduate Programs, Management Skills, Hospitality Curriculum

### Introduction

Research on hospitality graduate education in the past has predominately focused on analyzing program characteristics. For instance, in 1987, Schmelzer, Costello, and Blalock presented results of their study that analyzed hospitality program characteristics, such as academic placement and age of program, and changes in program enrollment and faculty characteristics. Nearly seven years later, Zabel (1994) conducted a study reporting on program degree(s) offered, plans to establish or expand a graduate program in hospitality, areas of specialization, core requirements of programs and research requirements for master's degree students. McCain and Rappole (1996) outlined the chronological development, enrollment patterns and education models of graduate degree programs in hospitality whereas the results were updated in a follow-up study in 2000.

Despite the anticipated growth in hospitality graduate education, little is known about what the hospitality industry expects from the graduate programs and how educators and graduate students perceive such programs. The purpose of this study was to propose a multidimensional framework for assessing the status quo of hospitality graduate education by addressing the following four research questions:

- (1) Do key stakeholders of hospitality graduate education agree with student learning outcomes as measured by general management skills (GMS)?
- (2) Do key stakeholders of hospitality graduate education agree with curricula that graduate students are required to take?
- (3) Do key stakeholders of hospitality graduate education agree with the generalist or specialist approach to education?
- (4) Which teaching methods are perceived to be most effective in achieving general management skills?

### Method

#### *Sample and Data Collection*

The perceptions of hospitality graduate education were explored by three major groups which all benefit significantly from the educational experience: organizations in the hospitality industry - who are the major consumers; the educational institutions - who are the providers; and the students - who are the products of the educational experience. In order to evaluate perceptions of the industry, a total of 256 human resource managers working in the hospitality industry in the U.S. were selected from Directory of Hotel and Lodging Companies published by American Hotel and Lodging Association and from Compact Disclosure, a database which holds information on publicly trading companies. A self-administered questionnaire was sent to the 256 human resource managers.

In addition to a search over the Internet, the Guide to College Programs in Hospitality, Tourism, and Culinary Arts (7<sup>th</sup> ed.) published by the International Council on Hotel, Restaurant, and Institutional Education (CHRIE) was used to select the current list of colleges granting hospitality master's degrees in the United States. Thirty three schools were identified through this process. A total of 177 educators teaching at the 33 colleges in the U.S. were contacted and were asked to participate in the survey research. Since there was no database available for graduate students, graduate program directors of the 33 programs were contacted and asked to forward an online survey to their current master's students.

### *Measures and Analysis*

To assess student learning outcomes, the GMS measures identified in Boyatzis and Kolb's 1995 study were adapted. Participants were asked to rate their agreement on a 7-point Likert scale (*1 = strongly disagree, 7 = strongly agree*). Definitions of the 12 items were included in the questionnaire. Since there was a lack of information on curriculum of graduate hospitality education, curriculum information was collected through the identified graduate program websites. A total of 25 schools published the required/core courses on-line at the time of collecting the data. Given the available information, a list of required courses was constructed. The most commonly required core courses identified were: human resources management; financial management; marketing in hospitality management; strategic management; technology in hospitality; hospitality operation management; hospitality management; research methods; and statistics. Based on feedback from managers in the hospitality industry, internship as a course was also added to the questionnaire. Participants were asked to rate their agreement with the sentence "graduate students must take the following courses" on a 7-point Likert scale. Two items were included to measure the generalist and specialist approaches (e.g. hospitality master's programs should focus on educating students as generalists). A 7-point Likert scale was then used to measure the educational approach. Educators and students were also asked about effectiveness of teaching methods in developing management skills. The participants rated the effectiveness of eleven teaching methods on a 7-point Likert scale adapted from the Educational Institute of American Hotel & Lodging Association's Certified Hospitality Educator workshop materials. Analyses of variance were used to examine the research questions.

### **Results**

Out of the 256 human resource managers contacted, 34 completed and returned useable surveys, yielding a 13% response rate. Of the 177 educators, 50 completed the questionnaire for a 28% response rate. Lastly, of all the graduate students asked to complete the online research, 54 returned useable surveys. Thus, a total of 138 responses were used in the analysis.

### *Student Learning Outcome*

The first research question proposed in this study was "do key stakeholders of hospitality graduate education agree with student learning outcomes as measured by general management skills (GMSs)?" The results indicate that the key stakeholders perceived GMSs differently. Managers believed that relationship skills ( $M = 6.76$ ) were the most important competency that graduate students must possess on graduation, followed by action skills ( $M = 6.71$ ), leadership skills ( $M = 6.59$ ), initiative skills ( $M = 6.53$ ), and sense-making ( $M = 6.50$ ). Educators, on the other hand, placed information analysis skills ( $M = 6.74$ ) as the most critical competency, followed by relationship skills ( $M = 6.62$ ), leadership skills ( $M = 6.60$ ), information gathering skills ( $M = 6.60$ ), initiative skills ( $M = 6.52$ ), and goal-setting skills ( $M = 6.52$ ). Students' perceptions were somewhat similar to managers'. Relationship skills ( $M = 6.58$ ) was a key competency that students perceived as most important to possess upon graduation, followed by leadership skills ( $M = 6.56$ ), sense-making skills ( $M = 6.37$ ), information analysis skills ( $M = 6.35$ ), and goal-setting skills ( $M = 6.30$ ). Overall, the results demonstrate very interesting findings as managers perceived action skills as very important for students to possess upon graduation while educators and students did not. Information analysis skills had an opposite result; educators believed information analysis skills were very important for students to have upon graduation, while managers and students had less emphasis on this competency.

Significant differences were found among the participants' perceptions given six GMSs: information analysis, action, information gathering, quantitative, help, and theory skills. Educators considered information analysis skills as a critical competency, more so than managers and students did. In evaluating significant differences among action skills, managers tended to perceive this competency as more critical than both educators and students did in terms of the needs of acquiring the skill upon graduation. Information gathering skills were considered by educators as more critical to obtain upon graduation than students did. Managers also believed that graduate students must possess help skills upon graduation more so than what students perceive was necessary. Lastly, in evaluating significant differences among theory skills, educators tended to perceive this competency as more critical than students did in terms of the needs of acquiring the skill upon graduation.

### *Curricula*

The second research question addressed, “do key stakeholders of hospitality graduate education agree with curricula that graduate students are required to take?” The stakeholders did not agree with the current curriculum that graduate students are required to take. Based on the overall means, the five top courses that graduate students are required to take are finance ( $M = 6.46$ ), strategic management ( $M = 6.45$ ), human resource management ( $M = 6.45$ ), operation management ( $M = 6.43$ ), and marketing ( $M = 6.27$ ). Similar to the results of GMSs, the three stakeholders had different opinions about the curriculum that graduate students are required to take.

The managers indicated that operation management was the most important subject ( $M = 6.79$ ) while educators perceived this course as less critical ( $M = 6.27$ ). Interestingly operation management was not included in the educators’ top five list of courses. On the other hand, the students ( $M = 6.49$ ) perceive marketing more importantly than how managers ( $M = 5.85$ ) perceived this subject and an internship course was considered more important among the students than to educators. Educators agreed that students must take a research methods course, while industry managers agree to a less extent.

### *Generalist vs. Specialist*

The third research question was stated as “do key stakeholders of hospitality graduate education agree with a generalist or specialist approach to education?” The analysis of variance shows that the stakeholders were in disagreement in considering the graduate educational approaches. Managers agreed more that hospitality graduate programs should focus on educating students to be generalists than what students perceived while the students agreed more with the specialist approach than what managers indicated.

### *The Effectiveness of Teaching Methods*

The final research question proposed in this study addressed the effectiveness of teaching methods in achieving GMSs. The one-way analyses of variance showed there were significant differences between the teaching methods for each GMSs ( $p < 0.01$ ).

To enhance relationship skills, role play was found to be the most effective teaching method. However, the role play teaching method was not significantly different than small group discussions, projects, and games/simulations for relationship skills. For leadership skills, eight teaching methods were perceived as effective and had no significant differences between them. The eight teaching methods are role plays, small-group discussions, projects, in-basket exercises, games/simulations, case studies, student presentations, panel/forum/guest speakers.

Educators and students perceived projects as most effective in achieving information analysis skills, but projects were not found to be significantly different from case studies and student presentations. To enhance initiative skills, projects were perceived as the most effective, but had no significant difference with other six teaching methods, role plays, small-group discussions, in-basket exercises, games/simulations, case studies, and student presentations.

Educators and students perceived case studies as the most effective to obtain sense-making skills, but the effectiveness of case studies was not significantly different than the other eight teaching methods: role plays, small-group discussions, projects, in-basket exercises, games/simulations, student presentations, panel/forum/guest speakers, and demonstrations. For action skills, projects were found to be the most effective teaching method, but had no significant difference with other six methods, role plays, small-group discussions, in-basket exercises, games/simulations, case studies, and student presentations. Educators and students perceived all teaching methods except field trips as effective to enhance goal-setting skills. Projects were perceived to be the most effective teaching method for information gathering skills, but were not found to be significantly different from games/simulations, case studies, and student presentations. Projects were also recognized as the most effective method to teach quantitative skills, but did not differ significantly from games/simulations, case studies, student presentations, and demonstrations.

Evaluating help skills, educators and students consider role playing as the most effective teaching method, and the mean was significantly different from student presentations, panel/forum/guest speakers, demonstrations, field trips, and lecture. Demonstrations were significantly different from role plays, small-group discussions, in-basket exercises, panel/forum/guest speakers, and field trip to teach technology skills. For theory skills lecture was found to be the most effective teaching method, but it was not significantly different than projects and case studies.

### **Discussion**

The results of this study revealed that the key stakeholders have different perceptions and expectations about graduate education programs in hospitality. The findings also indicated that the industry, educators, and graduate students

perceive the student learning outcomes differently. Managers indicated graduate students should have action skills to a greater extent than the educators and students did. Managers expressed that graduate students must have ability to commit to objectives, to meet deadlines, to be persistent, and to be efficient. In addition, action skills were ranked as the second highest among the managers. This finding implies that the hospitality graduate education may not correctly correspond to the industry's needs. On the other hand, educators indicated that graduate students should possess information analysis skills upon graduation to a greater extent than managers and students did. It is not apparent at this point whether graduate students do not have sufficient action skills upon graduation. However what is apparent is that the industry recognizes such skills as highly important. Therefore, it is suggested that future research focuses on examining if hospitality graduate programs are successfully teaching these particular skills to graduate students, and if graduate students possess the required competencies upon graduation.

The results of curricular analysis indicate that an opinion gap exists between the industry and educators. The differing views regarding operations management between managers and educators implies that hospitality graduate education may not correspond to what the industry demands and desires. The preliminary results of the curricular based analysis of the information published online actually show that only seven of 25 programs require an operations management course for graduate students. As Goodmand and Sprague (1991, p.69) pointed out "our industry's needs are not fully met by general business-management programs, even though they have jumped on the service-industry bandwagon, because those programs are still chiefly operated to manufacturing and commodities". The results of this study imply that the industry's needs that general business programs cannot satisfy has not been fully met by hospitality graduate education programs. Since hospitality graduate education still seems to be similar to a general business program in terms of its curriculum, the hospitality graduate program must seek to meet the industry's needs. Otherwise, the proliferation of the hospitality graduate program may cease in the future. Although educators believed that finance management was the most important subject and managers perceived it as the second most important subject, only 14 of 25 programs required such a course. The reason why only 14 programs were requiring this course was not apparent at the time this study was conducted, but the hospitality graduate programs should consider a relevant curriculum redesign if they wish to satisfy their target customers, the hospitality industry.

The debate over the generalist versus specialist educational approach turns out to be that managers and educators supported the generalist approach and students supported the specialist approach. One possible assumption for students' belief in the specialist approach could be that the students possibly realize incompetence in a specific skill or knowledge area at work and this realization leads them to pursue a graduate degree. However, the result of this study suggests that the industry desires someone with broad knowledge. This finding is in conflict with Evans' (1990) graduate education model and consistent with Jones' (1991) argument. As Jones (1991) suggested that the programs specialized in functional areas such as marketing, accounting, or human resource management can take over the preparation, while the hospitality graduate programs need to prepare graduate students to have more general and broad knowledge in hospitality management. Lastly, educators and students perceived role plays, projects, and case studies as effective teaching methods that can enhance general management skills. This finding is somewhat promising for hospitality graduate programs because projects and case studies have often been incorporated in course structure.

A limitation of this study is that only the perceptions of the general management skills desired by the industry, educators, and students were investigated. Future research should determine whether hospitality graduate students possess such skills upon graduation. The study is also limited by the samples. The industry sample was predominately comprised of human resource managers (97%). Additional research should conduct a study with participants holding different job titles to determine whether the same findings would yield. This study investigated how differently the key stakeholders perceive hospitality graduate education. Future studies should investigate whether hospitality graduate programs hold their value when compared with general business graduate programs. This type of research may suggest strengths and weaknesses of the hospitality graduate education and possible rectification to improve these programs.

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## **Antecedents to Employee and Management Turnover Intent in a Quick Foodservice Environment**

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### **Abstract**

The hospitality industry, particularly the foodservice sector, is plagued by high levels of voluntary employee turnover. In this research, antecedents of voluntary employee turnover are identified utilizing both quantitative and qualitative methodologies. As anticipated, regression analysis identifies job search and job satisfaction as significant predictors of turnover intent while structured interviews with management-level personnel identifies violations in the psychological contract, established during the pre-employment process, coupled with work-life balance challenges as being the primary predecessors to management turnover. Based upon this research, foodservice operators may want to re-evaluate management recruitment strategies as well as the hiring process in order to ensure that pre-employment expectations are met.

**Key Words:** Job satisfaction, turnover intent, psychological contract, work-life balance

### **Introduction**

The current study was commissioned by the participating firm in an effort to identify the antecedents of management turnover. Several hypotheses, based upon the turnover literature, are tested that relate not only to management turnover, but to voluntary employee turnover at all levels within this firm's quick foodservice environment. In addition, qualitative research is conducted in an effort to identify the primary causes of management turnover.

### **Review of the Literature**

Many turnover models attribute turnover to affective decisions related to job satisfaction and organizational commitment. Researchers often focus on turnover intention since it has a direct correlation to actual employee turnover and it has been determined that the reasons provided by employees for voluntarily leaving their positions in post-exit interviews are highly suspect (Steers and Mowday, 1981). Dissatisfaction with a job initiates a cognitive withdrawal process, which may manifest itself in turnover intention (Lambert, Hogan, & Barton, 2001). By analyzing the reasons for turnover intention, researchers attempt to identify the specific variables related to job dissatisfaction that may lead to employee turnover.

Porter & Steers (1973) developed a model which proposes that an employee will develop an intention to quit if the employer fails to meet the expectations of the employee relative to compensation, advancement opportunities, and other factors. Over the next two decades, much of the turnover research resulted in extensions or refinements to this satisfaction-focused core model (e.g. Price & Mueller, 1977; Sheridan & Abelson, 1983; Hom & Griffeth, 1991). As antecedents to job dissatisfaction, several factors have been linked to turnover including repetitive work, pay, communication, and co-worker relationships (Mitchell & Lee, 2001). In addition, several constructs including job stress (Wright & Cropanzano, 1998), organizational justice (Greenberg, 1990), and ambiguity (Bedian & Armenakis, 1998), just to name a few, have been linked to turnover via job satisfaction.

In 1977, Mobley theorized that job dissatisfaction and actual turnover was mediated by the search for alternate employment. Based upon Mobley's theorizing, a second component was added to many turnover models: employment search. Muchinsky & Morrow (1980), Steers & Mowday (1981), Carsten & Spector (1987) and others examined the importance of the employment market and perceived availability of job alternatives in determining actual turnover. Blau (1994) proposed that the employment search process occurred in two stages; the first stage involves preparatory work and the second active search. Steel (2002) expanded on this temporal analysis of the job search process concluding that the process evolves from passive scanning of employment market information, to a focused search for concrete job prospects, and finally to actually contacting potential employers. Through this process, the employee receives feedback relative to their employability, which may ultimately determine the employee's ability to quit.

Mitchell and Lee (2001) argue that one shortcoming of this traditional stream of turnover theory rests in the fact that it fails to explain why some employees quit without conducting a job search. Steel counters that resource substitutability, such as savings or spontaneous job offers, can explain these exceptions; however, Mitchell and Lee do not see these as merely exceptions. They also contend that traditional models of turnover fail to explain voluntary quits even when an employee is satisfied with their job. As a result, they proposed the unfolding model of voluntary turnover, which has been empirically validated and refined over the past decade.



The development of the unfolding model also led Mitchell & Lee to investigate factors that may motivate an employee to remain in a job. From this research, the construct of job embeddedness was developed. The roots of job embeddedness are related to Lewin's (1951) field theory. "Lewin suggested that we see ourselves enmeshed in a network of forces and connections" according to Mitchell & Lee (2001). From this, Mitchell & Lee theorized that a person is more likely to remain in an employment relationship if the individual maintains valuable connections through his or her employment. When contemplating a change in employers, an employee is less likely to abandon his or her current employment relationship if it results in the termination of valuable on-the-job or off-the-job interpersonal relationships with individuals or groups (Mitchell & Lee, 2001). Job embeddedness has the potential to influence an individual's mental deliberations relative to turnover intent.

The Service-Profit Chain (SPC) proposes that a relationship exists between employee satisfaction, service quality, customer satisfaction, customer loyalty, and the profitability of a service firm (Heskett, Jones, Loveman, Sasser, & Schlesinger, 1994). The model suggests that a service firm that prioritizes employee satisfaction will deliver a higher level of customer service, which will ultimately lead to a higher level of profitability. Employee satisfaction serves as the catalyst for improved productivity, lower labor costs, reduced turnover and increased employee commitment as well as customer retention, referrals and loyalty. These positive business outcomes, in turn, contribute to the profitability of a service firm.

A key element of the SPC is the "Cycle of Capability", which is critical to maximizing customer satisfaction. Each element of the cycle of capability is a human resource-related construct. It starts with careful employee (and customer) selection followed by high-quality training. Good communication and support systems are the next element followed by employee empowerment. The cycle continues with employee accountability measures and recognition systems. These constructs lead to satisfied employees, which, in turn, result in employee referrals of candidates to fill any vacant positions. The SPC establishes the "satisfaction mirror" in which it is proposed that customer satisfaction levels are a direct reflection of the level of employee satisfaction within the firm since job satisfaction is a catalyst for improved employee retention. Improved employee retention allows the firm to maintain valuable, efficient relationships with its most profitable customers (Heskett, Sasser, & Schlesinger, 1997).

### **Proposed hypotheses**

In the quantitative component of this research, the following hypotheses are tested, which are developed based upon traditional turnover theory (satisfaction and job search models), the components of the "Cycle of Capability" (Heskett *et al.*, 1997), as well as the work of Mitchell and Lee (2001):

- H<sub>1</sub>: The level of selectivity in hiring associates will be positively related to job satisfaction and negatively related to turnover intent.
- H<sub>2</sub>: The level of training received by associates will be positively related to job satisfaction and negatively related to turnover intent.
- H<sub>3</sub>: The degree to which associates are empowered will be positively related to job satisfaction and negatively related to turnover intent.
- H<sub>4</sub>: The level of recognition received by associates will be positively related to job satisfaction and negatively related to turnover intent.
- H<sub>5</sub>: Job satisfaction will be negatively related to turnover intent.
- H<sub>6</sub>: Job embeddedness will be negatively related to turnover intent.
- H<sub>7</sub>: Job search will be positively related to turnover intent.
- H<sub>8</sub>: The variables selection, training, supervision, empowerment, recognition, satisfaction, embeddedness, and job search can be utilized to explain the variance in turnover intent.

### **Methodology**

The host firm is an operator of upscale, quick-service restaurants. The firm operates 51 outlets in one Midwestern state and one Western state. An associate opinion survey was developed and conducted. The instrument includes 114 items designed to measure 17 constructs. It was pre-tested for validity and reliability. The Cronbach-alpha for each variable is noted in the Correlation Table (Table 1). The survey was made available to the approximately 1,800 associates of the firm with 634 participating. Participants respond on a five-point scale for all questions with a five being the most positive response. Some items were reverse-coded as appropriate.

Qualitative, semi-structured interviews were also held with over 100 managers. Managers were asked eleven questions, which included such items as "What do you enjoy most about your job?" and "What is the biggest concern or frustration that you face in your current position?" Written responses were collected from each participant prior to the

group discussion to ensure that each individual voice was heard. The questions were then discussed in group sessions with approximately 10 – 15 managers participating in each group. The discussions lasted approximately two (2) hours each. Notes were taken, which were reviewed for accuracy with each group at the end of each session. This approach was utilized to both further validate the quantitative findings and to ensure that pre-conceived ideas for the causes of turnover within the firm did not prevent the researcher from identifying issues that may be unique to this firm or the quick foodservice environment in which the firm operates.

## Results

Outlined below is a correlation table (Table 1) which outlines the relationship between the variables of interest obtained from the associate survey (n=634). Hypotheses 1 through 5 are supported. As anticipated, job satisfaction is positively related while turnover intent is negatively related to employee perceived levels of selectivity (H<sub>1</sub>), training (H<sub>2</sub>), empowerment (H<sub>3</sub>), and recognition (H<sub>4</sub>). In addition, job satisfaction is negatively related to turnover intent (H<sub>5</sub>). Hypothesis six (H<sub>6</sub>), however, is not supported by the research, which indicates that job embeddedness, defined in the study by the strength of interpersonal relationships among co-workers, may not be related, at least in this environment, to job satisfaction and turnover intent as theorized by Mitchell and Lee (2001). Job search shows the strongest correlation to turnover intent, which indicates support for hypothesis seven (H<sub>7</sub>).

Table 1  
Correlation Table for Variables (Cronbach-alpha)

	1	2	3	4	5	6	7	8	9
1. Selection	(0.660)								
2. Training	0.520**	(0.689)							
3. Supervision	0.343**	0.399**	(0.887)						
4. Empowerment	0.150**	0.158**	0.367**	(0.764)					
5. Recognition	0.436**	0.462**	0.613**	0.311**	(0.746)				
6. Job satisfaction	0.503**	0.556**	0.507**	0.348**	0.646**	(0.719)			
7. Embeddedness	0.181**	0.235**	0.246**	0.051	0.291**	0.284**	(0.845)		
8. Job search	-0.198**	-0.263**	-0.281**	-0.169**	-0.301**	-0.434**	-0.096*	(0.673)	
9. Turnover intent	-0.167**	-0.218**	-0.133**	-0.061	-0.212**	-0.395**	-0.002	0.516**	(0.812)

\*\*  $p \leq 0.01$  \*  $0.01 \leq p \leq 0.05$

In order to evaluate hypothesis eight (H<sub>8</sub>), stepwise regression analysis was conducted, utilizing SPSS software (version 13.0). Models were tested utilizing the constructs of interest, including selection, training, supervision, empowerment, recognition, satisfaction, embeddedness, and job search, commencing with the construct that showed the strongest correlation with turnover intent, job search (0.516), and then subsequently adding additional variables in descending order of correlation strength. Four models were found to be statistically significant as outlined below, which suggests partial support for hypothesis eight (H<sub>8</sub>). The two-predictor model utilizing job search and job satisfaction appears to be the most efficient and parsimonious, with an F-statistic of 95.272 ( $p < 0.001$ ), an  $R^2$  of 0.274 and an adjusted  $R^2$  value of 0.271, since the addition of a third predictor, embeddedness, does not improve the  $R^2$  (0.287) or adjusted  $R^2$  value (0.282) substantially. Standardized coefficients for the two-factor model are 0.376 (job search) and -0.231 (job satisfaction).

From the management interviews, it is clear that quality of life is the primary issue affecting management turnover; managers with the firm perceive that they are working too many hours and that they lack control over their lives. Many of the managers left other organizations and joined the host firm to improve their quality of life, but the interviews revealed that the psychological contract established during the hiring process is quickly violated once managers join the organization. In this context, a psychological contract is defined as “an individual’s belief regarding the terms and conditions of a reciprocal exchange agreement between that focal person [the employee] and another party [the firm]” (Robinson & Rousseau, 1994). Regarding the common concerns consistent across all locations, the following items are identified from the management interviews:

- Overwhelming workload coupled with a need to be “hands-on” and “on the floor” throughout the manager’s assigned shift, which results in 12 – 14 hour workdays
- Lack of management “depth”, which creates scheduling challenges and contributes to the long workdays
- Management selection
- Staffing issues, including quality of associates, inability to hire associates, staffing levels, etc.
- Bonus program, which is not clearly understood by managers in the field
- Execution of training
- Increased bureaucracy due to the rapid growth of the organization
- Limited career growth opportunities due to the flat structure of the organization
- Communication issues

Frustration among managers relative to work-life balance issues are supported by findings in the associate survey. The frequency of negative management responses in the survey relative to work-life balance items clearly illustrates the concern. Nearly forty percent (38.69%) of management responses are negative relative to quality of life items in the survey while another 14.53% are “neutral” on this critical issue; this indicates that 53.22% of the firm’s managers do not feel positive about their ability to appropriately balance their responsibilities at work with their personal life. Coincidentally, the firm is experienced 58.5% annual management turnover in 2004.

### **Discussion**

The foodservice industry has a well-deserved reputation for placing heavy demands upon managers. Many foodservice operators sincerely desire to provide store-level managers with a good “quality of life”; however, firms must establish appropriate policies in order to ensure that this goal is achieved. Senior executives often focus primarily on operating results as opposed to work-life issues. Although it is important to manage operating results, it is also apparent that it is at least equally important that senior management of a firm focus on the human resource issues that drive employee and customer satisfaction as well as increased profitability. Executives must not view providing a people-friendly work environment and maximizing profitability as mutually exclusive goals; these goals are complementary. The direct costs of management turnover are high, in this case totaling over \$700,000 in 2004, not to mention the indirect costs. The reduction of these costs by any amount contributes directly to the increased profitability of the firm. Quite candidly, many of the management concerns can be addressed for little or no increase in costs; it is merely a matter of increasing the amount of focus and attention placed on managing the quality of the work environment for the store-level managers.

In addition, the recruitment of management personnel is an ongoing challenge for many foodservice operators due to high turnover, coupled with a shortage of qualified managers. Consequently, many firms hire recruiters whose sole responsibility is to identify and recruit management personnel as is the case with the host firm. In many cases, these recruiters do not have an accurate understanding of the actual work environment in which the candidate will work or substantial interaction with the candidate once they are hired by the organization. This can lead to a breach in the psychological contract that is established between the candidate and the organization during the hiring process. Firms must manage the hiring process very carefully. Although recruiters must identify and pre-screen management candidates, the managers that will eventually supervise the candidates must also be involved in the hiring process; this will ensure that more realistic expectations are established and that the operating managers have some ownership of the hiring decisions. Job previews and working interviews are just some of the measures that can be implemented to ensure that the candidates establish valid psychological contracts through the hiring process.

This study underlines the importance of focusing on the human resource elements of running a successful business, as outlined in the cycle of capability, as a means of achieving positive business outcomes. Too often, the focus of senior management is solely on financial results. To use a sports analogy, success can only be achieved by focusing on the basics of the game, like blocking, tackling, good defense, and protecting the ball, as opposed to keeping your eyes constantly on the scoreboard.

### **Limitations and implications for future research**

The research participants in this study are limited to one foodservice operator. Consequently, it is inappropriate to generalize these findings to the industry as a whole; however, high management turnover is a problem that is well-documented throughout the industry. In addition, previous empirical work in the area of voluntary employee turnover is supported by this research, which may indicate that this firm’s experience is typical. Replication of this research to include other hospitality firms may be a worthwhile exercise in order to determine the generalizability of this research.

This research supports the notion that voluntary employee turnover is a very complex construct that is related to a multitude of factors that involve several rational and affective cognitions. The best predictor as to whether or not an individual is likely to leave a job may be the degree to which they are actively seeking another position coupled with the individual’s employability. Why an individual is actually seeking a new position may remain a mystery not only to the employer but, to a certain extent, to the job seeker as well. It is a complex decision process that is impacted by a number of factors including work-life balance issues, overall job satisfaction, compensation and benefits, and the relationship with one’s supervisor, just to name a few of the variables that may contribute to the decision. In addition, researchers must continue to identify the variables that can be controlled by employers that will have the greatest impact on reducing voluntary employee turnover to more desirable levels. This will improve the quality of life for managers working within the industry while simultaneously improving the level customer service and profitability of foodservice operators.

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## **The Influence of Learning Style on Hospitality Students' Preference for Web Assignments**

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### **Abstract**

Investigation of students' learning styles has increased dramatically over the past decade, concurrent with the increased use of the Web for instruction. This research project was designed to explore whether active or reflective Web activities were preferred based on learning style. Results indicated that active, sensing, visual and sequential learning styles were all positively correlated and negatively correlated to reflective, intuitive, verbal and global, which were positively correlated to each other. The active-sequential assignment was preferred over the reflective-global assignment. Instructors should be aware of students' learning styles in order to plan effective assignments that enable students to utilize different learning styles.

**Key Words:** Learning styles, active, reflective, sequential, global

### **Introduction**

Learning style refers to the way an individual consistently perceives, interacts with, and responds to learning activities (Riding & Cheema, 1991). The exploration of student learning styles began in the 1950s (Fatt, 2000) with over 20 different models were reported by the late 90s (Hayes & Allinson, 1996). Concurrent with the increased interest in learning styles, university faculty members have increased their use of Web-based instruction (Harris, Dwyer, & Leeming, 2003). The need to research the types of Web instructional activities preferred by students based on their learning style was apparent. Knowing an individual's normal way of problem-solving or thinking could be beneficial to determine effective instructional designs for learning activities. This research project was designed to explore whether a Web-based learning activity was preferred by students, based on their learning style.

### **Literature Review**

General agreement appears in the psychology literature that individuals differ in their preference for absorbing and processing information and that these differences are important (van Zuanenberg, Wilkinson & Anderson, 2000). Instructional designers contend that individual learning styles should be considered prior to developing learning experiences (James, 2001), however, Merrill, Drake, Lacy and Pratt (1998) stated that learning styles were not important in instructional design. Cassidy (2004) stated that learning styles may be stable over time, however, they may be responsive to the demands of each learning experience. Therefore, students should acquire the skill to use the appropriate learning style as needed (Felder & Spurlin, 2005).

Cassidy's (2004) overview critiques 23 models of learning styles available, however, he concluded that few models had received sufficient attention to determine their validity. Instruments that have been tested to describe individual learning styles, include Kolb's Learning Style Inventory (LSI) in 1984, the Learning Style Questionnaire (LSQ) (Honey & Mumford, 1986), and the Index of Learning Style (ILS) by Felder and Soloman (1999). The ILS was designed to measure students' preference for learning, based on four scales; active-reflective, sensing-intuitive, visual-verbal, and sequential-global. Based on Felder's (1996) work, Active learners learn by trial and working with others, while Reflective learners think about the problem by themselves. Sensing learners are practical and prefer facts and techniques, whereas Intuitive learners are more conceptual and oriented towards theories. Visual learners prefer pictorial presentations with Verbal learners preferring written and verbal explanations. Sequential learners are linear and orderly in their thinking while Global learners prefer a holistic, systems approach. Felder and Soloman's ILS has been used in a variety of studies to identify learning styles of students, to compare learning styles across academic majors, and to compare learning style with course performance.

Bacon (2004) used the ILS to survey business students in a lecture marketing class to determine if differences in learning styles were associated with course performance. Bacon found that the only ILS subscale with a reliability of .70

was the sensing/intuitive. A small correlation (.146) was found between students who are more reflective and course performance. Bacon concluded that researchers should check the reliabilities of learning styles surveys and that they had little impact on test performance in his study.

Research studies on Web searching methods are numerous (Jansen & Pooch, 2001; Novotny, 2004), however, few studies were found that explored students' preferences for types of Web interactivity based on learning style. Undergraduate students, who preferred the Sequential learning style, indicated that they favored searching the Web for information rather than interacting with instructors or other students asynchronously, via message boards and group discussions. (Sabry & Baldwin, 2003). No studies were found that explored whether learning style influenced students' preference for type of Web assignments.

The majority of studies conducted in hospitality and tourism management programs used the Kolb Learning Styles Inventory. Berger (1983) reported that most students were divergers, or preferred viewing concrete situations from various perspectives. Hsu's (1997/1998) results of a survey of first-year students indicated that the dominant learning style was converger. These individuals prefer to find practical uses for ideas. Hsu and Wolfe (2003) also found that the majority of hospitality management students surveyed in Hong Kong were convergers. Males preferred abstract concepts and active experimentation more than females. Using Felder and Soloman's Index of Learning Styles, Lee and Kamp (2005) reported that junior and senior hospitality management students surveyed were mainly active, sensing, visual and sequential learners. More females indicated they used sensing and verbal learning styles than males.

### **Methodology**

This study was designed to test the following propositions:

P<sub>1</sub>: Students who are active are more likely to also be sensing, visual and sequential in their learning style, and students who are reflective are more likely to also be intuitive, verbal and global in their learning style.

P<sub>2</sub>: Students in a social science field of study, looking to enter careers in practical and hands on industries, like the hospitality industry, are more likely to be active, sensing, visual and sequential in their learning style.

P<sub>3</sub>: Students in a social science field of study, looking to enter careers in practical and hands on industries, like the hospitality industry, are more likely to find it easier to answer, to find it more enjoyable, and to feel they learn more from active and sequential learning assignments than from reflective and global learning assignments.

### *Participants*

The study was conducted with 133 undergraduate hospitality and tourism students in a northeastern US university, fulfilling a participation requirement for their marketing course. After deleting incomplete surveys, there were 130 usable surveys. The Felder-Soloman ILS (1999) was used due to the dimensions of interest, its ease of use, and the studies reporting the validity of the instrument.(Zwyno, 2003; van Zwanenberg et al. 2000). The instrument includes 44 questions that measure four individual learning style dimensions.

### *Procedure*

The study took place during two class periods to reduce the association of the learning styles survey to the Web assignment. Participants signed two informed consent forms that explained the purpose of each study; the first study was a survey on learning styles and the second was an evaluation of websites for information for an in-class assignment.

The Felder-Soloman Index of Learning Styles (Felder & Soloman, 2004) index is designed to determine the preferences of students on four dimensions: active—reflective, sensing—intuitive, visual—verbal, and sequential—global. Each dimension is measured using 11 items. This survey has been used in other published studies (Felder & Spurlin, 2005; Litzinger, Lee, Wise & Felder, 2005) with the web-based version taken over 100, 000 times last year (Litzinger, Lee, Wise & Felder, 2005).

The Web search project was designed to assess students' preferences for different types of assignments (active and sequential vs. reflective and global). The first part asked the participants to search the Web for four credible sources of four effects of September 11<sup>th</sup> on the tourism, recreation, hotel and/or restaurant industries in the US. The second part asked the participants to write at least two paragraphs explaining the overall effect of Florida's 2004 hurricane season on the tourism, recreation, hotel and/or restaurant industries in Florida, using four credible sources.

The participants were then asked to rate how strongly they agreed or disagreed with statements about their satisfaction, learning, confidence with the information, and performance with the assignment on a Likert scale of 1 (strongly disagree) to 5 (strongly agree). Next the participants were asked about possible contributing factors to their responses such as number of hours spent navigating the Internet and average in-class and required out-of-class research use

of the Internet. Additionally they were asked to rate the usefulness of several different search engines on a scale of 1 (not useful) to 10 (very useful). Lastly the participants were asked which part of the assignment (Part 1- active and sequential or Part 2 - reflective and global) they found easier, more enjoyable and the one they learned the most from.

## Results

Before performing an analysis for statistically significant relationships between learning styles and preferences for types of assignments, we wanted to test the reliability and validity of the learning style measures with this sample. Previous studies have used engineering undergraduates as their sample, which could have somewhat different learning styles. To test internal consistency reliability, we calculated the Cronbach alpha coefficient for each dimension of the learning styles survey. We found by retaining 5 item measures of the active—reflective scale, we achieved a Cronbach alpha coefficient of 0.50. The visual—verbal and the active—reflective retained 6 item measures, and the sequential—global scale retained 8 item measures with Cronbach alpha coefficients of 0.66, 0.61, and 0.58 respectively. This may seem low to physical scientists, but in social science settings Tuckman (1999) distinguishes between instruments that measure a univariate quantity (mastery of a particular skill) and instruments that measure preferences or attitudes. Tuckman suggests that an alpha of 0.75 is required for instruments that measure univariate quantities and 0.50 for instruments that measure attitudes or preferences. All four dimensions had an alpha of 0.50 or greater, signifying the internal reliability of the survey with this sample.

We then performed a 4 factor confirmatory factor analysis with the item measures to check for construct validity using a Varimax pre-rotation and a Promax rotation. Each of the dimension item measures had the highest factor loadings on the same factor, separate from the other dimension item factors. This would indicate that the item measures for each dimension were measuring the same construct and a different construct from the other dimensions, suggesting construct validity.

Last, we performed a correlation analysis for the four dimensions. As proposed in P<sub>1</sub>, active, sensing, visual and sequential dimensions were all positively correlated and negatively correlated to reflective, intuitive, verbal and global dimensions, which were positively correlated to each other. This would suggest that when a person is active, they are also sensing, visual and sequential, and when they are reflective they are intuitive, verbal and global.

## Learning Styles

A breakdown of the 130 participants' learning styles shows that the majority of hospitality and tourism students prefer active, sensing, visual and sequential learning dimensions. In the active—reflective dimension, 43 of the 93 “active” students had 1 to 4 more active choices than reflective choices (slightly active), 40 of 93 students had 5 to 7 more active choices (moderately active) and only 10 of 93 had 8 to 11 more active choices than reflective choices (strongly active). This was also true for the “reflective” students; 32 of 37, 5 of 37 and 0 of 37. Similar results were found for the sensing—intuitive, visual—verbal, and sequential—global dimensions. This would indicate that although the hospitality and tourism students in this sample were overwhelmingly active, sensing, visual and sequential in their learning styles, it was primarily at a slight to moderate scale.

The results support our proposition P<sub>2</sub>, that students in a social science field of study, looking to enter careers in practical and hands-on industries are more likely to be active, sensing, visual and sequential in their learning styles in contrast to students in physical science fields looking to enter highly technical careers. This finding concurred with Lee and Kamp (2005).

## Learning Style and Ease, Enjoyment and Learning of Assignment

Our third proposition is that students in a social science field of study, looking to enter careers in practical and hands-on industries, like the hospitality industry, are more likely to find it easier to answer, to find it more enjoyable, and to feel they learn more from active and sequential learning assignments than from reflective and global learning assignments.

An analysis of the data supports P<sub>3</sub>. When asked which assignment question did you find easier to answer, 93 (72%) of the 130 participants chose the active-sequential assignment. The participants also chose active-sequential more often (79 out of 130) when asked which assignment question did you find more enjoyable to work on. However, when asked which assignment question did you learn the most from, the participants were almost evenly split between the active-sequential and the reflective global learning assignments. Hospitality students apparently believe they learn as much from assignments that they find more difficult and less enjoyable.

### Contributing Factors

An analysis of possible contributing factors was conducted to see if there could be other explanations for our results. A one-way between subjects ANOVA, using the  $MS_{\text{error}}$  from the overall analysis of variance table was used to test the relationship between the number of hours spent navigating the Internet, average in-class and required out-of-class research use of the Internet with learning styles and preference for Web-based assignments. No significant relationship was found for any of the possible contributing factors and learning styles or preference for Web-based assignments ( $F_{(125)} = 0.89$ , n.s.).

### Discussion, Limitations and Implications

In this study, we investigated students' learning styles and Web-based instruction. More specifically this research project was designed to explore whether active or reflective Web assignments were preferred based on learning style. The results indicate that active, sensing, visual and sequential learning styles were all positively correlated and negatively correlated to reflective, intuitive, verbal and global, which were positively correlated to each other. Additionally, we found that hospitality and tourism students tend to have active, sensing, visual and sequential learning styles and that the active-sequential assignment was preferred over the reflective-global assignment.

These results would seem to indicate that students' learning styles should be considered when designing enjoyable and effective Web-based assignments. The ILS can be used to help faculty members design learning assignments that require different styles. This variety of assignments will help students understand their strengths and weaknesses when confronted with assignments that require different learning styles. An advantage of using Web-based assignments is that they can be designed to address sensing, visual, active, and sequential styles or intuitive, verbal, reflective and global dimensions.

Age or gender influences were not determined. We were unable to test age differences since the sample was college students. A future study that investigates whether learning styles and preferences for Web-based assignments changes with age would be a good study to succeed this one. We chose not to investigate gender for two reasons. First, requesting participants to supply personal information usually results in decreased participation. Second, gender was found to be significant in only one previous study of hospitality management students. In that study (Hsu and Wolfe, 2003), male hospitality management students surveyed in Hong Kong preferred abstract concepts and active experimentation more than females. A second limitation is the student interest in the topics selected for the Web assignment. While September 11<sup>th</sup>, 2001 was an important date for most students, the hurricanes in Florida might not be.

An important implication from this study that has not been found in previous studies is the correlation between active, sensing, visual and sequential learning styles. This would suggest that when testing hospitality management students for their learning styles, the 11 item active-reflective section would be sufficient, saving the longer testing process. Additional studies should be conducted to support this finding.

Second, while many universities offer classes for faculty on Powerpoint, Web page development, and course management systems, these universities do not typically promote instruction on learning styles and the development of assignments to achieve a balance between students of various learning styles. An awareness of the student learning style profiles can lead to more effective learning situations and better prepared students.

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## Identifying the Personal and Professional Benefits of Participating in a Cooperative Education Experience from Alumni Perspectives

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### Abstract

The purpose of this study is to characterize the personal and professional benefits that alumni perceive they have experienced as a result of their participation in a cooperative education program. Alumni from Widener University School of Hospitality Management (classes of 2003 and 2004) were asked to complete a three-part questionnaire that included a Likert-scale section, a narrative section, and a demographic section. Data were analyzed using descriptive statistics. Alumni collectively felt that they learned to handle ambiguity, accept responsibility, become more self-confident, broaden their perspectives, develop time and stress management awareness, and develop interpersonal sensitivity.

**Key Words:** Experiential learning, Cooperative Education, Personal Outcomes, Professional Outcomes.

### Introduction

The cooperative education program within the School of Hospitality Management at Widener University is considered a capstone semester of the four-year undergraduate curriculum. This program requires the student to work for one employer during the 16-week semester for a total of 600 uninterrupted hours of employment; the student must return to campus on a designated day each week for a six-hour leadership development seminar. This 15-credit, integrated work/academic semester closely resembles the Kolb model of experiential learning, whereby learning is enhanced because of the processes employed within the cycle.

The cooperative education program has been identified as a highlight to the four-year degree, and therefore, is a potential marketing tool to prospective students. There are no data available, however, on the real or perceived value of the cooperative education program from the perspective of alumni. To effectively, accurately and legitimately market the cooperative education program, the decision-makers, both at the school and the university level, need substantive data from this group of program users. Therefore, this study will attempt to quantifiably characterize the personal and professional benefits that alumni perceive they have experienced as a result of participation in this cooperative education program. The following questions have been posed:

- What personal outcomes do Widener University Hospitality Management alumni identify as benefits of their cooperative education experience?
- What professional outcomes do Widener University Hospitality Management alumni identify as benefits of their cooperative education experience?

### Experiential Learning

#### *What is experiential learning?*

Experiential learning is most simply defined as “any hands-on experience that yields learning” (Kiser & Partlow, 1999, p.70). According to Wilson and Baird (1997), experiential learning is based on the premise that “knowledge is validated from experiences in relation to the social context in which they are gained” (p.3). Experiential learning, therefore, occurs in many and various forms. Most frequently, in post secondary hospitality management curricula, experiential learning takes the form of the internship, the externship, practicum, or the cooperative education experience. All seem to have varying definition from school to school, but the basic premise is that the student uses experience as a learning tool (Kiser & Partlow, 1999).

Experiential learning stems from John Dewey’s philosophy of progressive education. Dewey (1921) promoted education of the whole person, and in doing so, promoted the importance of work as an integral way to learn. Dewey asserted that applying what is done in school to what is done on the outside brings value to classroom learning. His model of learning reflected the idea that education is a social process that occurs beyond the walls of a school. His theory of experiential learning, therefore, indicated that all knowledge areas are enhanced when the content to be learned is centered toward real-life situations (Roberts, 2003). The traditional academicians, however, are concerned with the need to balance theory and practice in the undergraduate curriculum. In response to that concern, the application of David Kolb’s model has been used in some hospitality management curriculums (Kiser & Partlow, 1999).

The Kolb model effectively integrates classroom learning with experiential learning. The Kolb model suggests that learning occurs most completely when a student can successfully visit a cycle of four processes. Those four processes

include the Concrete Experience, the Reflective Observation, the Abstract Conceptualization, and Active Experimentation (Svinicki & Dixon, 1987). While there is no definitive starting point, a student must travel the cycle sequentially for optimal learning to occur (Raschick & Maypole, 1998).

In support of the Kolb learning cycle, Whitney (1984) identified an achievement of balance between working at a job and learning theory in a classroom. Working, without any academic guidance may be ineffective toward achieving any theoretical learning. Theory, by itself, may be too abstract to understand without experiencing the concept. Steed and Schwer (2003) also defended the Kolb learning cycle by stating that experiential learning in the hospitality curriculums might provide hospitality students a competitive edge over others who have not been exposed to the learning cycle.

#### *What are the benefits of experiential learning?*

The student-learner benefits of experiential learning programs are presumed numerous, from the perspective of student learners as well as from the perspective of industry professionals. Gryski, Johnson, and O'Toole (1987) emphasized benefits such as role socialization, the development of interpersonal skills, the development of networking and career opportunities, a sense of confidence, and an understanding and concern for ethics and values. Additionally, the intern experience, when shared in the classroom, can provide an active, participative and enriching experience for all involved.

Marlin-Bennett (2002) supported this set of benefits. Additionally, this researcher pointed out that internships actually facilitate the transition from school to work, and helps the student to acquire full-time employment. Marlin-Bennett continued her discussion by indicating that internships help the student to develop job skills and increase their "professional competency." Furthermore, students have the opportunity to learn how decisions are made in organizations. Wonacott (2002) also reported positive outcomes for work-based learning in secondary and post secondary situations. In a study conducted on Wisconsin youth, the experiential learning yielded greater technical skills for the students, as well as broader skills such as problem-solving, critical thinking, and teamwork. Also noted were positive changes in attitude, greater willingness to accept responsibility, and enhanced self-esteem.

In their exploratory study of hospitality internship practices, Petrillose and Montgomery (1997/1998) used the argument of J.W. Mosser who claimed that experiential education could have an effect on skills development in a liberal arts curriculum ----"namely, the clarifying of values and integrity; communication skills; critical thinking skills; preparation for work and learning how to learn, cultural sophistication and cross cultural understanding; empathy; tolerance and respect for others; loyalty and intimacy; and a sense of self" (p. 46).

Hospitality research has indicated that students who complete internships are better prepared for employment (Van Hoof, 2000). Additionally, these students are more marketable than their peers who have no internship experience (Petrillose & Montgomery, 1997/1998). These same researchers added that networking opportunities are more available for those who participate in an internship program. Those who enter the workforce after completing the internship are more self-confident and less anxious about entering the industry (Herrick, 1987). Research by Coco (2000) showed that those who have participated in internship programs tend to experience job advancement more quickly than those who do not participate in intern programs.

#### **Methodology**

A questionnaire-based, descriptive approach was chosen for this study. This approach allows the researcher to describe the value, or benefits that alumni feel they acquire through participation in the cooperative education program in the School of Hospitality Management at Widener University. In describing the population and their views of experiential learning, this research will secondarily determine if the gender variable has a relationship with the perceived benefits of the cooperative education program. The targeted participants were alumni from the School of Hospitality Management at Widener University who graduated from December 2002 through August 2004. The total number of alumni to whom surveys were sent was 61. Of those 61 eligible alumni, 58 surveys were sent to valid addresses. Of those 58 surveys, 45 were completed and returned (77.6% return).

#### *Instrumentation*

The research tool is a self-administered survey. The survey was developed by the researcher because of the unique nature of the data needed to answer the posed research questions. The survey was developed in three parts. In part one, the instrument used a six-point Likert scale. Thirty-two questions were chosen to evaluate, primarily from the established course objectives, as well as benefits that have been reviewed in the literature. Fourteen survey questions addressed the first research question (personal outcomes) and 18 questions addressed the second research question (professional outcomes). Respondents were asked to select the response with which they most agree (1= strongly disagree; 6= strongly agree). A six-point scale was selected to force the respondent into a position. Each question started with the key phrase, "Because of

my co-op experience in the School of Hospitality Management, I BELIEVE.....” The second part of the survey asked for open-ended responses to the two research questions, and asked the respondents to comment on their overall position on the importance of co-op in the school’s curriculum. These responses were then compared to the Likert-scale questions to establish consistency in responses. The third section of the instrument included ten demographic questions. The responses from these questions described the sample. The tool was critiqued for clarity, sequencing, and content by a panel of three hospitality educators. These experts also assessed the instrument for its relationship to the course objectives within the cooperative education curriculum. The tool was then piloted by a group of graduating seniors to test for clarity, directional ease and readability.

#### *Data collection procedures*

The research survey was sent via U.S. mail. Alumni were invited to participate in this study through the development of a full cover letter that accompanied the questionnaire. At the two-week point, a follow-up metered postcard was sent to those who did not return the survey. By the end of the three-week period, 42 surveys had been returned. At 3 ½ weeks, 45 surveys were returned (a 77.6 % return).

#### *Data analysis*

Descriptive statistics, such as frequencies, percentages, means and standard deviations were used to characterize survey responses. The analysis also made use of tables to describe differences in responses of the alumni related to gender. Such breakdowns were in the form of mean scores. Basically, the researcher was interested in finding if the value of the co-op experience is influenced by gender. *t*-tests were used to determine statistical significance between male and female responses. All categorical data was tabulated for frequency. All narrative responses were recorded word for word. The responses were then coded for the various categories to which they pertain.

#### **Limitations of the study**

This study is specific in purpose, and non-random sampling techniques were used, thereby limiting the generalization of study findings to other experientially-based hospitality programs. Care must be taken not to generalize this information to other universities. This should, however, provide some exploratory insights for other universities.

#### **Findings**

##### *Demographic characteristics of the alumni*

Of the 45 responses received from the survey questionnaire, 17 males responded and 28 females responded. From the class of 2003 (December 2002, May 2003, August 2003 graduates), 27 responses were returned. Eighteen responses were returned from the class of 2004 (December 2003, May 2004, August 2004 graduates). Of the 45 respondents, 41 or 91.1% are currently employed in the hospitality industry or in an affiliate segment. Four respondents (8.9%) are not working in the industry. Nineteen respondents or 42.2% of the 45 respondents began their career through their co-op position, or through a contact made during that position.

##### *Qualitative results*

In part II, the narrative section of the questionnaire, alumni were specifically asked to list some of the personal and professional benefits they experienced from completing the co-op program at Widener University. All alumni responded to this question. The responses were placed into similar categories. Both professional and personal outcomes listed were numerous. The most frequently cited professional outcomes include (in descending order): interpersonal skills enhanced (including appreciation of others, understanding others, comfort with others, and empowering/motivating others) (19); provided a realistic preview of the industry and an opportunity to “practice” in a professional setting (16); enhanced time management skills (12); enhanced technical skills and knowledge of the business (including financial understanding) (11); provided networking opportunities (8). The most frequently identified personal outcomes were as follows: developed self-awareness (17); developed better understanding of others’ needs, behaviors, and motivation (overall enhanced interpersonal skills) (13); increased confidence (9); improved time management skills (9).

##### *Descriptive findings overview*

The first research question, which addresses the personal outcomes that alumni believe they have gained through the cooperative education experience, reveals many intangible benefits. The benefits with the six highest means and the highest agreement frequency percentages include: 1) learning that not all situations are absolute, 2) better understanding of responsibility, 3) learning to accept responsibility for choices made, 4) gaining an understanding of “self”, 5) developing self-confidence, and 6) developing correlation between time management and level of stress. The standard deviation was extremely low at .79774 for the top overall mean question, whereby alumni believe that they developed an understanding that situations are not usually “black and white.” Additionally, this question had a very high frequency of agree and

strongly agree responses, as 41 of 45 respondents indicated that they strongly agree or agree with this question (Table 1). These responses were confirmed through the narrative responses. Interestingly, the development of self-awareness was most prominently discussed in narrative form. Self-confidence was developed, time management skills were improved, and the alumni reported a general broadening of their perspective. Alumni also reported a development of their interpersonal skills, which was not reported as one of the top overall mean values.

Table 1  
Frequency of Cumulative Responses --- Personal Outcomes Identified (n=45)

Personal Outcomes	1,2 (disagree)		3,4 (moderate)		5,6 (agree)	
	#	%	#	%	#	%
Comfortable with oral skills	1	.022	10	.222	34	.755
Self confidence grew	2	.044	5	.111	38	.844
Time management increased	4	.088	9	.20	32	.711
Understood responsibility	3	.066	4	.088	38	.844
Accepted responsibility for choices	1	.022	6	.133	38	.844
Developed critical thought	0	.00	14	.311	31	.688
Increase in self-awareness	1	.022	7	.155	37	.822
My way is not the only way	1	.022	10	.222	34	.755
Aware of others' needs	2	.044	7	.155	36	.80
Aware of why others behave as they do	0	.00	10	.222	35	.777
Do not judge others prematurely	0	.00	14	.311	31	.688
Not all situations are black and white	1	.022	3	.066	41	.911
Learned to understand self	2	.044	6	.133	37	.822
Time management is related to stress	3	.066	6	.133	36	.80

The second research question, which addresses the professional benefits that alumni feel they have gained through participation in the co-op program, reveals strong agreement and overall high means (Table 2). The professional outcomes with the highest means and the highest agreement frequency percentages include: 1) understanding that stress affects overall behavior as a manager, 2) understanding that motivation is not the same for every individual, 3) understanding what it means to “dress for success” in the business world, 4) increased marketability as a job candidate in the industry, 5) increased understanding of the leadership role, 6) increased understanding that behavior can be shaped for effective leadership, and 7) increased professional maturity. Increased marketability as a job candidate in the industry shows a strong mean score of 5.288, but did not receive the highest ranking in strong agreement from a frequency perspective; it ranked ninth of 18 in frequency percentage strength. Gaining a realistic preview of the hospitality industry ranked high in the frequency distribution, but ranked eighth in overall mean value at 5.177.

The lowest overall mean scores in professional outcome relate to: 1) using the co-op position to connect alumni to first full-time employment position, 2) understanding of ethics in the business world, 3) developing networking opportunities and 4) interacting comfortably with supervisor in the workplace. The mean values for these outcomes ranged 3.93 to 4.82. The frequency distribution is generally consistent with these mean scores. The following areas show the least agreement/strong agreement: 1) connection of co-op position to first full-time employment, 2) network development, 3) acceptance of cross-cultural differences, 4) improvement of written communication skills for business use, 5) understanding of ethics in the business world, and 6) increase in technical skills/knowledge.

From the narrative section, alumni reported most frequently that their interpersonal skills were enhanced. This was written in many ways. Overall, there is an appreciation for others, for their needs, and for their behaviors. The second most frequently reported benefit is the realistic preview the students gain as a cooperative education student. The third most reported benefit is the development of time management skills.

Table 2  
Overall Mean Scores and Standard Deviation, Gender Mean Scores --- Professional Outcomes ( $n=45$ )

Professional Outcomes	Overall Mean	SD	Male Mean	Female Mean
Realistic Preview	5.177	.86	5.06	5.06
Technical skills acquired	5.044	1.043	5.06	5.03
Networking opportunities	4.822	1.402	4.71	4.89
Dress for success	5.488	.92	5.53	5.46
Marketable candidate	5.288	1.053	5.53	5.14
Interact with co-workers comfortably	5.155	1.086	5.18	5.14
Interact with supervisor w/comfort	4.82	1.248	5.06	5.06
Interact with guests comfortably	4.977	.988	4.88	5.04
Enhanced written communication skills	4.866	1.235	4.82	4.89
Understand ethical decision making	4.755	1.151	4.82	4.71
Connected to first job	3.933	2.157	4.24	3.75
Matured professionally	5.244	.8569	5.18	5.29
More accepting of cross-cultural difference	4.866	1.078	4.82	4.89
Understand role of leader	5.288	.6613	5.35	5.25
Responsibility as a leader	5.111	.8587	5.29	5.00
Motivation is not the same for all	5.577	.5431	5.59	5.57
Behavior can be re-shaped for effective leadership	5.288	.75745	5.12	5.39
Stress affects behavior as a manager	5.6	.65366	5.53	5.64

Note: Means were derived from a 6-point Likert scale. 1=strongly disagree; 6=strongly agree.

It is interesting to note that the male and female mean values are very similar in all questions. Using  $p<.05$  and a 2-tailed test, there is no statistical significance in the mean responses of men compared to the mean responses for women. This was consistent for personal and professional outcomes.

## Conclusion

The findings are somewhat consistent with the literature review. The cooperative education program within the School of Hospitality Management at Widener University provides opportunity for many personal and professional benefits to be realized. Much of the literature tends to focus on the tangible benefits of a cooperative education experience. Often stated, the professional outcomes include increased marketability of the candidate, development of networking opportunities, better preparedness for the industry, gaining a realistic preview of the industry, and quicker adaptation to the expected role. Indeed, this study verified that these outcomes were a part of the cooperative education experience from the

perspective of alumni from the School of Hospitality Management at Widener University. However, this study looked more deeply into management preparedness for the hospitality industry. Therefore, alumni responded strongly to areas that they had learned for leadership success, such as lessons in time management, stress levels, lessons of professional dress, motivational techniques, role socialization, interpersonal skill enhancement and the importance of developing the professional self. While alumni did favorably respond to outcomes such as marketability, networking, and increased technical skills, these areas were clearly not the most prominent outcomes of their cooperative education experience. Ethical interests in business were not well developed, according to the results of this study.

In terms of personal outcomes, the literature indicates that the cooperative education experience can foster self-confidence, increase willingness to accept responsibility, and develop a sense of efficacy. This study supports these literature findings, particularly in the areas of self-confidence and responsibility. The co-op experience at Widener University in the School of Hospitality Management provides many intangible outcomes, however, according to the survey results. Most predominantly, alumni reported that they learned that not all situations are absolute. Students learned to broaden their perspective. Another very strong outcome was the development of self-awareness. Alumni indicated that they became more self-aware and learned to understand themselves and their needs and behavior more fully. Alumni further indicated that they learned to become sensitive to the needs of others, both personally and in the workplace, which strengthens their interpersonal skill development. One area that was not a markedly high outcome was in the area of critical thought. Alumni did not show a high overall mean, nor high agreement in the development of critical thinking skills. This appears to be inconsistent with their high ratings in learning that all situations are not “black and white.”

### Implications

The classroom component of the cooperative education experience may allow an opportunity for students to make sense of the happenings within the workplace. The workplace may provide the opportunity for abstract concepts and classroom theory to come to life. With this cyclical model in cooperative education, both personal and professional benefits are possible for the student to achieve and develop. In fact, the findings indicate that the intangible, behavioral outcomes may be more powerful than the tangible benefits. While this study cannot be generalized, the results of this study may serve as an indicator for other universities who are developing a cooperative education component and structure for their curriculum. The results overwhelmingly indicate perceived value from the alumni perspective with regard to the entire cooperative education experience.

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## At-Destination Visitor Information Search

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### Abstract

Numerous studies have investigated consumer's information search prior to arrival at a destination. This study attempts to fill a research gap by focusing on a traveler's information search behavior for services once at the destination. In particular, the research explores service-related decisions through all phases of a trip, with an emphasis on the sources of information utilized while at a destination. Demographic and trip purpose characteristics are also examined for their impact on decision strategies. Using the results of this study, practitioners and academics alike can design effective strategies for marketing to travelers.

Key Words: information search, travel decision locus, word of mouth, at-destination decisions, information sources

### Introduction

Evidence of traveler's use of information sources prior to departure is widespread (e.g., Fodness & Murray, 1997; Gursoy & Chen, 2000), and consequently traveler's information search behavior has become a central research stream in tourism studies. This research has predominantly focused on information search behavior prior to departure, and only limited systematic efforts to investigate at-destination information search behavior are evident. This study investigates the locus of travel-related decisions through all phases of a trip, but had a central focus on the traveler's information search behavior for travel-related services while at the destination. In particular, the research explores the location of service-related decisions prior to and throughout the trip (whether for business or pleasure), the sources of information utilized to include locals residing at a destination, and how visitor demographic and trip purpose variables influence decision making strategies for travel.

### Background Literature

Because of uncertainties associated with travel and limitless destinations, travelers may postpone making some travel-related decisions until they are at the destination and thus incorporate information from the local area into their decision processes (Bettman, Luce & Payne, 1998; DiPietro, Severt, Rompf & Ricci, 2005; Hwang & Fesenmaier, 2004; Jeng & Fesenmaier, 2002; Rompf, 2001; Rompf, DiPietro & Ricci, 2005). The use of visitor centers, and friends and family at a destination are the typically researched sources of traveler information while at a destination (Fodness & Murray, 1999). Less commonly researched are the 'locals' that live and work in a destination.

### Purpose of Study

The researchers intercepted travelers as they were departing a renown international destination and captured information on the locus of their decisions for travel-related services at the destination as well as their sources of information utilized in making the various travel decisions. The current study was guided by the following questions:

- 1) What is the trip-oriented locus, dominant and otherwise, of the variety of decisions that travelers make for travel-related services? Does the purpose of the trip mediate the decision locus?
- 2) What sources are utilized by a traveler to make a service-venue decision while at the destination itself?
- 3) What is the comparative role of the information sources in selecting lodging accommodations, dining experiences, and entertainment and leisure activities while at a destination?

## Methodology

A survey instrument was developed and pre-tested to provide data on visitors' decision points for travel-related services. 'Overnight lodging facilities', 'eating & dining facilities', 'entertainment facilities', 'recreational facilities', 'transportation services', and 'other' services comprised six service categories for pre-trip, in-transit, and at-destination venue decisions investigated for their current trip. Subsequent sections of the questionnaire probed the source and utilization of information for decisions made once the visitor arrived at a destination.

Respondents were intercepted as they departed a well-known international destination via air. Over forty million visitors travel to the destination annually for a variety of purposes, with the dominant two being leisure travelers and convention/meeting attendees. Two rental car agencies (one on-site and one off-site of the airport) were selected and participated in the study. During a thirty day period departing visitors were sampled across all days of the week as well as across selected day-parts. Both self-administered and verbal protocol collection strategies were utilized to provide a flexible option for respondent participation. Respondents were intercepted after the car rental return transaction and/or during shuttle bus transit to the airport from the off-site location.

## Results

Demographic characteristics took into account the gender, age, educational level of the respondents, the income level of the household, and the purpose of the trip. The data was examined using chi-square analysis and found statistically significant differences regarding when people make decisions and this information is presented in Table 1. Travel related decisions may be made at any of three different times - prior to departure, in transit, and once at the destination. For lodging and transportation, the dominant time to make decisions was prior to departure for the destination. Regarding eating and dining decisions, most respondents make decisions regarding this service once at the destination. The entertainment and recreation categories were not as clear cut, but there were differences in these as well. Primarily the decisions regarding entertainment and recreation were made while at the destination, but the second largest stage for making these decisions was prior to departure for the destination.

Table 1  
Trip Decision Making Stages

Type of travel decision	Prior to departure	In transit	At destination	$\chi^2$ Statistics
Lodging	327	7	28	531.06***
Eating and dining	33	30	297	391.65***
Entertainment	128	19	178	122.04***
Recreation	129	18	149	100.95***
Transportation	311	9	0	285.01***

\*\*\* Significant at  $\alpha = .001$  level.

The data showed that respondents gathered information on travel-related services from multiple sources while at the destination, and the results are presented in Table 2. The chi-square statistics again showed that statistically significant differences in the number and type of information sources used by the travelers existed. The primary type of information source used by respondents was friends and relatives in all categories of travel related services. The hotel staff was the second largest source of information for all of the travel related services, except transportation where car rental service personnel were asked for recommendations more than hotel staff.

Table 2  
At-destination information source and service type

Type of travel related service	Friends and relatives	Visitor center staff	Hotel staff	Restaurant staff	Car rental service personnel	Local residents	$\chi^2$ Statistics
Lodging	68	7	27	1	3	6	179.86***
Eating & dining	93	14	53	17	8	21	156.56***
Recreation	87	16	44	5	3	11	248.68***
Entertainment	91	15	36	9	3	17	186.23***
Transportation	43	2	18	5	43	3	99.68***

\*\*\* Significant at  $\alpha = .001$  level.

Efforts have also been made to understand the influence of demographics and tripographics on the travel decision making stages. Gender and origin of residence were selected for demographics and trip purpose was chosen for tripographics. For origin of residence, distinction was only made between domestic and international travelers. Low counts or a lack of respondents in several of the cells resulted in the trip purpose to be collapsed from 4 to 2 to run the chi-square analysis. “Business” and “business & pleasure” were combined and “personal” & “pleasure” travel were combined. The analysis results are reported in Table 3.

Table 3  
Demographics and Travel Decision Making Stages

Decision Type	Gender		Trip purpose		Origin of Residence	
<i>Lodging</i>	<i>Female</i>	<i>Male</i>	<i>Business &amp; Pleasure</i>	<i>Personal and Pleasure</i>	<i>Domestic</i>	<i>International</i>
Prior to departure	160	157	94	224	230	78
In transit	4	3	1	6	5	1
At destination	14	13	8	20	21	6
	$(\chi^2 = .137, df = 2, P = .934)$		$(\chi^2 = .779, df = 2, P = .678)$		$(\chi^2 = .35, df = 2, P = .839)$	
<i>Eating &amp; Dining</i>						
Prior to departure	13	16	13	16	22	5
In transit	13	17	5	25	24	6
At destination	151	139	85	207	207	74
	$(\chi^2 = 1.27, df = 2, P = .530)$		$(\chi^2 = 5.67, df = 2, P = .058^*)$		$(\chi^2 = 1.26, df = 2, P = .532)$	
<i>Entertainment</i>						
Prior to departure	71	51	22	101	95	23
In transit	8	11	3	16	12	6
At destination	82	91	57	117	118	52
	$(\chi^2 = 4.02, df = 2, P = .134)$		$(\chi^2 = 9.38, df = 2, P = .009^{**})$		$(\chi^2 = 4.87, df = 2, P = .088^*)$	
<i>Recreation</i>						
Prior to departure	69	56	22	103	94	29
In transit	4	14	3	15	14	4
At destination	71	73	52	93	102	36
	$(\chi^2 = 6.93, df = 2, P = .013^{**})$		$(\chi^2 = 12.42, df = 2, P = .002^{**})$		$(\chi^2 = .29, df = 2, P = .867)$	
<i>Transportation</i>						
Prior to departure	162	141	79	226	229	65
In transit	2	7	3	6	6	2
At destination			82	232	235	67
	$(\chi^2 = 3.42, df = 2, P = .064^*)$		$(\chi^2 = .25, df = 2, P = .617)$		$(\chi^2 = .04, df = 2, P = .846)$	

\* Significant at  $\alpha = .10$  level. \*\* Significant at  $\alpha = .05$  level. \*\*\*Significant at  $\alpha = .01$  level

It can be seen in Table 3 that there are not very many significant differences regarding the types of decisions made and when they are made across the travel timeframes for males and females. The exceptions for this regarding gender issues are related to recreation and transportation decisions. Regarding decisions made pertaining to recreation activities- males tend to make decisions more often in transit and at the destination rather than prior to departure in comparison to their female counterparts ( $\chi^2 = 6.93, df = 2, P = .013$ ). Also, of interest is the fact that in the decision making related to transportation females tend to make decisions prior to departure more often than males ( $\chi^2 = 3.42, df = 2, P = .064$ ).

Other areas of note are that regarding the purpose of the trip, personal & pleasure travelers, seemingly because of their trip intent, tend to more often make decisions about entertainment and recreation, as well as they tend to make these decisions more often prior to departure and while in transit over the business & pleasure travelers ( $\chi^2 = 9.38, df = 2, P = .009$  for entertainment;  $\chi^2 = 12.42, df = 2, P = .002$  for recreation).

Traveling internationally to the destination and traveling domestically to the destination also impacts the stage of travel decision-making regarding certain destination service venues. The respondents in the current study differed in their responses to the entertainment services depending on their origin. Domestic travelers make more of their entertainment decisions prior to departure or while in transit to the destination relative to international travelers ( $\chi^2 = 4.87, df = 2, P = .088$ ).

## **Discussion**

### *Research Question 1*

What is the trip-oriented locus, dominant and otherwise, of the variety of decisions that travelers make for travel-related services? Does the purpose of the trip mediate the decision locus? The current study found that travelers make different travel decisions at different times throughout the course of the trip. Some of the decisions are primarily made prior to departure and these decisions include lodging and transportation. The primary decisions that are made at the destinations have to do with dining decisions, as well as decisions related to entertainment and recreation activities.

In response to the first research question, Table 2 shows that the trip-oriented locus does vary regarding when the decisions are made for a trip. It also shows that there are significant differences between the type of decision made and the tendency to make the decisions prior to departure, in transit and at the destination itself. Organizations need to be cognizant of these factors when trying to determine the best marketing strategy to use when marketing a product or service.

### *Research Question 2*

What sources are utilized by a traveler to make a service-venue decision while at the destination itself? Table 3 gives insight into research question #2 regarding the sources that are utilized by a traveler while at the destination to make venue decisions. The chi-square analysis shows that there are significant differences in the types of people that are sought out for recommendations for varying venues and services. The predominant influence in information searching at the destination is friends and relatives of the traveler, followed by the hotel staff at the destination.

### *Research Question 3*

What is the comparative role of the information sources in selecting lodging accommodations, dining experiences, and entertainment and leisure activities while at a destination? In looking at research question #3, selected demographic and trip-related variables are analyzed in relation to the use of information referrals. The findings support the fact that males tend to make decisions for recreation while in transit to the destination. It also shows that females tend to make decisions for transportation prior to the departure for the destination. This finding may support a different marketing strategy for the genders regarding when they plan for various activities in travel. At a minimum, it supports the notion that venues should collect more data regarding gender planning when marketing their businesses.

The type of traveler (domestic traveler versus international traveler) also makes a difference in the category of entertainment. Domestic travelers consistently make decisions about entertainment prior to departure for the destination or while in transit, compared to the international traveler. This may be due to the heavy marketing campaigns of the area for the domestic market that has taken place since '9/11'. It may also be due to the large numbers of domestic travelers that have friends and family members that have been to the Central Florida area and have passed along positive word of mouth messages or information on what to do and what to see while in Central Florida. It could also be that the international traveler, who tends to spend more days per trip to the Central Florida area, has more time to decide on entertainment venues versus the domestic traveler who does not spend the same length of time here, hence the need for making many of these decisions prior to arrival at the destination. Finally, it could be due to the higher perceived risks of having an unplanned international trip as compared with an unplanned domestic trip. International trips may be perceived by the traveler as presenting more unknowns than domestic trips due to the usually greater distance, paper processing, and timelines involved in planning for international trips.

## **Conclusion**

Based on the current paper, areas for future research include additional studies regarding specific comparisons of the travelers' decision making process while at the destination by segmenting the study on a specific segment whether it be a focus on accommodations, a focus on entertainment and leisure or a focus on dining. Such specific information would provide more useful information to these business segments as well as allow more questions and information on the type of decision strategies used and whether they may vary with the categorization of accommodation, dining or entertainment.

Additionally, studies may be categorized by only domestic travelers or only international travelers to try and learn more about some of the differences that may be present regarding these two travel types. This partitioning of the domestic and international travelers would allow for additional research questions regarding the different travel modes to be researched. This will aid in creating strategic marketing imperatives that organizations can use to determine how and when different travelers start planning for their trips and how these organizations may vary their efforts with different travelers whether it be domestic and international, male or female, and also how different categorizations of accommodation, dining and leisure may work together to increase their markets.

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## A Taxonomy for Comparing Cities that Attract Conventions

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### Abstract

The Convention, Exposition and Meeting Industry (CEMI) has become a big market in the tourism sector. All major cities try to attract convention makers by providing attributes such as a wide variety of hotels to choose from, high numbers of air departures, delicious food and restaurants, etc. This research will (1) ascertain the most important attributes, (2) develop scales for them, and (3) rank U.S. cities on these scales.

Key Words: Conventions, meetings, city attractiveness, city characteristics, convention decision-making, destination decision

### Introduction

Today, more and more cities are developing or expanding convention related facilities. This trend had provoked serious competition among cities and conventions centers as they fight to attract the convention, meeting and exhibitions industry (CEMI). This lucrative sector has direct spending of almost \$85 billion, pays over \$12 billion in taxes annually, and supports 1.6 million jobs (Deloitte & Touche, 1995). But what is it that makes a city the ideal place for conventions and exhibitions? Is it the quality of its restaurants, the variety of entertainment or perhaps the security that attracts meeting planners and attendees? To address this question, this research undertakes an analysis of all 137 cities with convention centers (Gavel, 2005). The literature is reviewed to ascertain variables, produce scales and rate cities on these scales. Knowing that CEMI brings an increase in the economy of city, it is important to discover which factors are relevant at the moment that meeting planners or attendees want to select the next convention site.

### Literature Review

"It is not just about the convention center; we figured that out a long time ago," said Bob Schultz, spokesman for the Indianapolis Convention & Visitors Association. "You have to have the infrastructure that contributes to a good convention city, especially in this day and age" (The Birmingham News, 2005, p. 1A). Different studies have been conducted to examine the reasons why some cities are more popular than others when planners choose a site for a convention, exhibition or meeting. The extant research relies heavily on the work of Fenich (2001) and falls under the rubric of 'city attractiveness'. Content analysis is applied to the literature review to find the most cited attractiveness attributes. Thirteen previous studies were analyzed. This literature review revealed that almost all of the studies found similar attributes were important such as hotel room numbers, restaurants, air transportation, convention center space, climate, etc. The review of literature (Table 1) shows that many factors affect convention makers' decision. But do these attributes have a significant affect on CEMI market?

Cities are selected for the conventions based on their attractiveness. From year to year, these meetings attract larger or fewer attendees depending upon the attractiveness of the location or destination selected for the meeting (D. Peterson, 2004). As Fenich (2001) stated, "There is no single ideal convention city or convention center, physical and operational characteristics of cities and convention centers must match the market each intends to target. Therefore, cities consider building a new convention center, expanding an existing center."

Convention centers build new facilities in order to provide both continued and better service. Therefore, of the five top-ranked real estate markets (citywide) revealed in an annual survey of the largest real estate investors (Miller, 1996-2000), four are also top-ranked for downtown investment (Seattle, San Francisco, Boston, and Chicago). Not surprisingly, these cities are also top-ranked for convention attendance (Miller, 1996-2000).

Table 1  
Convention Destination Factors in Previous Studies

<b>Fortin&amp;Ritchie</b>	<b>Fenich</b>	<b>Lawson</b>	<b>Bonn Et Al</b>	<b>M&amp;C Checklist</b>	<b>Zia</b>
Hotels	Hotel Rooms	Overall Cost	Air Transport	air transport	Hotels
Regional lifestyle	Restaurant	Weather	Hotels	traffic	air transport
Restaurants	Convention Center	Natural features	Transportation	transportation	ambiance
Personal Safety	Local Transportation	Sports	Security/safety	taxis	restaurants
Local interest	Air transport	Recreation	Rental Cars	climate	safety
Accessibility/auto	Attractions	History	Water Sports	restaurants	leisure
Tourism features	Arts Calendar	Culture	Shopping	shopping	tourism features
Transportation	Museums	Social interest	Sightseeing	entertainment	vitality
Convention center	Outdoor Activities	Shopping	Scenery	recreation	
Scenery	Cost	Entertainment	Climate	destination	
Air transport	Climate	Sightseeing			
Climate	Safety	Restaurants			
<b>Led&amp;Levite</b>	<b>Crouch&amp;Ritchie</b>	<b>Assoc. Mgmt.</b>	<b>Zelinsky</b>	<b>Kirschbaum</b>	<b>Success. Meetings</b>
Hotels	air transport	convention center	sports facilities	location	Hotels
accessibility	restaurants	Hotels	accessibility	convention center	service
destination	transportation	climate	destination	air transport	safety
restaurants	convention center	air transport	convention center	accessibility	air transport
destination	destination	tourism features	highways	shopping	recreation
entertainment	Hotels	sports facilities	air transport	restaurants	
Overall cost	safety	restaurants	museums		
police	service	scenery	galleries		
diversity	convention center	recreation	theater		
population	friendly people				
<b>Marriot Checklist</b>	<b>Judd</b>	<b>Lisa &amp; Roger</b>			
air transport	restaurants	Restaurant			
local transport	Hotels	Air transport			
cost	entertainment	Cost			
climate	sightseeing	Convention center			
local interest		Accessibility			
restaurants		Local transport			
Safety					

## Methodology

This research tries to find answers to two primary questions. First, what makes a city attractive for conventions and second, which of the 137 convention cities rank highest on the most important attributes? The first step in this study was a review of the literature using a content analysis method. This yielded a rank order list of attributes. The second step was development of scales for the attractiveness attributes based on step one. Lastly, the cities were evaluated and ranked on the most important attributes.

## Content Analysis

In order to find the most important attributes to evaluate for this project, use was made of content analysis techniques. Content analysis has traditionally involved establishing categories and counting the number of instances when those categories are used in particular item of text to produce descriptive information on previous research contents (Silverman, 1997). Analyses of previous research (Fenich, 1992; Fortin&Ritchie, 1997; Lawson, 1981; Led&Levite, 1988) about city attractiveness showed that there are certain city characteristics that convention planners and attendees look for. Thirteen previous studies were analyzed to find out which attributes were commonly selected (see Table 1).

## Results of Previous Studies

After content analysis was applied, it was found that restaurants and air transportation factors were mentioned 9 times each in the 13 studies. This means that these attributes each represent 10.84% of all the attractiveness variables uncovered in previous research. Hotel room inventory and leisure/entertainment were each repeated 8 times, or 9.64% of the total. Attributes related to convention center space were mentioned 6 times for 7.23%. Safety and climate attributes were each noted 5 times and with 6.02%. Finally, the overall cost attribute was mentioned 2 times for 2.41% of the overall literature studied. The percentage affect of all attributes was determined in order to give them an effective rate, rather than their percentage to make accurate scale development (see Table 2).

Table 2  
Effective Factor Comparison

Attractor	Score	%	Effective Factor
Restaurants	9	10.84	4.50
Air transportation	9	10.84	4.50
Hotels	8	9.64	4.00
Leisure/Entertainment	8	9.64	4.00
Arts & Culture	7	8.43	3.50
Convention Center Space	6	7.23	3.00
Safety	5	6.02	2.50
Climate	5	6.02	2.50
Local Transportation	4	4.82	2.00
Overall Cost	2	2.41	1.00

### Scale Development

The second method used in this research was scale development using secondary data. Most of the data is from Cities Ranked & Rated (Bert Sperling & Peter Sander, 2004) while total hotel room numbers, average daily rate of a room, and occupancy rate information came from The American Hotel & Lodging Educational Foundation (2004). An additional step was creating a city ranking for each of the attributes mentioned above (Restaurants, Hotels, Safety, etc...). In order to make the comparison more reasonable, a logarithmic function was applied to each scale because some of the attributes has very high raw scores so they have a big impact over the total score. Since safety and cost are 'negative' attractors and work in inverse to the other attributes, an absolute value score was used (raw score minus 100). By doing this adjustment, all the attributes work in the same format such that a high number is always good for city attractiveness.

### Results

Table 2 shows the relative importance of the ten most significant. All 137 U.S. cities with convention centers were ranked on each attractiveness factor. The results for the most important factors are as follows:

#### Restaurants

It was found that the most important variable was 'restaurants' which also ranks as the most relevant attribute in previous research. Convention attendees spend \$76.16 for food & beverage per day, for an average stay of 3.6 nights (Tormohlen, D. 2004). In addition to restaurant attributes, the food and beverage provided by convention centers is also an effective fact on decision making. The quality and quantity of food at conventions prompts more comments from delegates than any other aspect of the convention (L.K. Jago & M. Deery, 2005).

The extant research found that New York ranked number one with a log score of 1.65 followed by Chicago at 1.61, then Atlanta, Los Angeles and Philadelphia tied at 1.56. It should be noted that Sperling & Sander consider quality, quantity and price in assessing restaurants in a community. The typical community in the U.S. has a log score of 1.00.

#### Air Transportation

Since many convention attendees travel by airplane to the convention city, the air transportation, better known as air life, to convention destination becomes an important variable. Delegates choose their flights based on a balance between cost and convenience. Even though, airlines do not offer the features that they used to offer (discounted tickets for convention attendees, amount departures), they still are seen as a potential source of support for conventions (L.K. Jago & M. Deery, 2005). There are some cities like Dallas and Fort Worth in Texas that share the same airport facility. For this comparison, we rank these two cities separately even though they have the same airport because both cities take advantage of the same airport. Data if from the Federal Aviation Administration.

This research found that Atlanta ranked first in Air Lift with 1,423 departures per day and a log score of 3.81. This is followed by Chicago (1,310 departures, 3.80 log score), Dallas (1,310; 3.77), Los Angeles (1,191; 3.73) and Denver (812; 3.56). Departures are utilized for this measure since conventions/attendees are more concerned with the availability of flights than number of passengers (enplanements).

#### Hotels



One of the most important features in a city is its hotel room inventory. For a most accurate result, this data comparison contained hotel room capacity in each city regardless of its rating (AAA ratings). A good example of the importance of hotel room availability is the case of Atlanta. Because this city lacked enough hotel rooms within walking distance of the Georgia World Congress Center, the National Association of Home Builders, which is the city's biggest convention of at more than 100,000 participants, pulled its 2007 and 2008 shows out of Atlanta earlier this year (Atlanta Journal and Constitution, 2005).

On this scale, Las Vegas ranked first with 146,769 hotel rooms and a log score of 5.77. It is followed by Los Angeles (123,531 rooms; log score 5.69), Orlando (113,377; 5.66), Chicago (98,445; 5.60), and Atlanta (90,555; 5.56).

#### *Leisure/Entertainment*

The fourth most important attractiveness attribute includes leisure activities and entertainment options. Along with eating, sleeping, attending a convention, people also want leisure activities in which to spend their free time. These activities include seeing a show, attending a sporting event, going to a museum, playing golf, etc. (G. Fenich, 2001). In the research at hand, activities such as dining, shopping, spectator sports, amusement parks, zoos, etc. are evaluated.

Not surprisingly, New York tops the list with a perfect raw score of 100% and a log of 2.61. It is followed by Chicago, Los Angeles and Nassau/Uniondale all tied with log scores of 2.60. San Francisco, Seattle, Boston and Washington follow, tied at 2.59.

#### *Arts and Culture*

This attractiveness factor includes an assessment of museums and performances of professional theater, classical music, ballet and dance. Once again New York tops the list with a log score of 2.61. It is followed by Boston, San Francisco, Washington, Chicago, and Los Angeles tied at 2.54.

#### *Convention Center*

It is certain that a convention center is one of the most important attributes for convention planners and attendees because, if the center can not meet the size needs, the city cannot attract the convention (G. Fenich, 2001). This research includes the stand alone, public convention centers for 137 cities and considers square footage of exhibit space rather than total size of the convention facilities.

Las Vegas has more exhibit space than anywhere else in the U.S. with 3,531,448 total square feet and a log score of 7.03. Chicago is second with 3,167,250 feet and a log score of 6.98. They are followed by Los Angeles (2,456,852 feet; 6.87 score), Orlando (2,128,920 feet; 6.81 score), and Atlanta (1,515,000 feet, 6.66 score). The average city in the U.S. with a convention center has a total of 340,000 square feet of exhibit space in the city and median space of 160,000.

#### *Safety*

How safe attendees feel in a city is a critical, albeit inverse, attractor. This scale uses FBI data to develop a composite 'crime' score that includes both violent crime and property crime. The two cities with the highest scores (absolute value 100 out of 100 and log of 2.40) and thus the least safe are Albuquerque and Memphis. They are followed by San Antonio, Topeka, Lubbock and Miami at 99 and log 2.39.

#### *Climate*

The 7<sup>th</sup> most important attractor is climate. People prefer moderate temperatures, moderate humidity, and plentiful sunshine (G. Fenich, 2001). This is an aggregate scale that was developed by Sperling and Sander using climatic data from NOAA. Salinas/Monterey (CA) tops the list with a perfect raw score of 100 and a log of 2.4. It is followed by Oakland, San Francisco and Honolulu at 99/2.39. Ranking fifth are three different cities in and around Los Angeles.

#### *Local Transportation*

Local transportation is almost as important as air transportation. Local transportation involves not only mobilization within the city but also access into the city. For example, highways, interstate connections, availability of taxi services within the city, metro-bus service, street cars, and etc... Meeting planners want to make sure that convention attendees will have different options for their mobilization. It was found that San Francisco ranks number 1 with a log score of 2.41. This is not surprising given that it is a city with wide verity of local transportation such as taxis, Muni buses and BART (San Francisco Bay Area Rapid Transit District), street cars. Beside all these mobilization alternatives, San Francisco has bridges, and ferries to facilitate transit. New York ranks 2<sup>nd</sup> (score 2.38) because of its complex traffic and efficiency of mass transit in and around the city. Also tied for second rank are Honolulu and Chicago. Philadelphia is 5<sup>th</sup> with a score of 2.37.

### Cost

Rounding out the ten most important city attractiveness variables is cost. In this research the average daily rate (ADR) for hotels rooms is used as a surrogate for how expensive a city is and the data is garnered from the American Hotel Lodging Association. The highest ADR was found in New York at \$169.61 (log 2.229) followed by Boston at \$121.35, San Francisco at \$120.88, West Palm Beach at \$119.34 and Honolulu at \$114.36.

### Ranking

One of the primary contributions the extant research makes to the discipline is production of an overall ranking scale of attractiveness for U.S. cities. This is accomplished using the results of the analysis done for each of the 137 cities on each of the ten most important attractiveness factors. The log score for each city was used to dampen the effects of large numbers such as exhibit space in the city which runs into the millions as compared to the 1 to 10 range of the restaurant scale. Further, each attractiveness variable score is weighted based on its relative importance as explained earlier.

Appendix A lists the scores and rankings for all 137 U.S. convention cities. It was found that Los Angeles is the most highly rated, and thus most attractive city for conventions and attendees followed by Chicago, Atlanta, Dallas and Orlando. Typical or average (mean rank) include such cities as Knoxville, Omaha, Oklahoma City and Rochester (NY). The least attractive cities for conventions are Bismark (ND), Rapid City (IA), Portland (ME) and Sioux Falls (SD).

The rankings are valuable to many people. For city leaders and CVB executives, this ranking provides empirical, rather than anecdotal, evidence of how attractive they are. This allows them to compare themselves to similar cities and also to see how they are doing on internal metrics like convention attendance or room night consumption to their peer cities. For meeting planners, this scale allows them to compare one city they are considering to another relative to attractiveness. There are obviously many other "what if" types of analysis that can be undertaken using this scale.

### Conclusion

Ratings of this research show similar results to previous studies. Restaurant rankings showed that New York did better than the others 136 cities considered for this comparison. Atlanta scored number 1 in air transportation being Hartsfield Atlanta International Airport is the airport facility with more daily departures. Las Vegas performed number 1 in hotel rooms' available and total convention space. The Las Vegas strip is considered the location of one of the largest concentrations of hotel rooms in the country. Rating of the different variables used for this study demonstrated the different preferences of meeting planners. San Francisco is well known for its outstanding local transportation. New York is also recognized for its leisure activities and its arts and culture. Boston scored the highest for cost among the 137 convention cities considered for this study meaning it's the most expensive convention city in the U.S. The most important finding in this study is the overall ranking list. These results will play an important part in the future of convention site selection. Convention planners might consider this data resource a valuable tool for their next convention destination plan.

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Appendix A  
Convention Attractiveness Ranking of U.S. Cities

Rank	City	St	Tot. Log Score
1	LOS ANGELES	CA	31.82
2	CHICAGO	IL	31.60
3	ATLANTA	GA	31.23
4	DALLAS	TX	31.15
5	ORLANDO	FL	30.83
6	NEW YORK	NY	30.49
7	MIAMI	FL	30.48
8	PHILADELPIA	PA	30.37
9	LAS VEGAS	NV	30.31
10	SAN FRANCISCO	CA	30.27
11	HOUSTON	TX	30.27
12	NEW ORLEANS	LA	30.19
13	DETROIT	MI	29.81
14	SEATTLE	WA	29.75
15	DENVER	CO	29.74
16	BOSTON	MA	29.66
17	PHOENIX/MESA	AZ	29.64
18	ST. LOUIS	MO	29.47
19	PORTLAND	OR	29.33

20	KANSAS CITY	MO	29.32
21	SAN DIEGO	CA	29.22
22	WASHINGTON	DC	29.20
23	BALTIMORE	MD	29.13
24	TAMPA	FL	29.08
25	CINCINNATI	OH	29.04
26	FORT WORTH	TX	29.03
27	HONOLULU	HI	28.87
28	MINNEAPOLIS	MN	28.74
29	LOUISVILLE	KY	28.64
30	WEST PALM BEACH	FL	28.55
31	CHARLOTTE	NC	28.42
32	TUCSON	AZ	28.38
33	SAN ANTONIO	TX	28.38
34	CLEVELAND	OH	28.34
35	COLUMBUS	OH	28.27
36	ATLANTIC CITY	NJ	28.27
37	RALEIGH	NC	28.26
38	NORFOLK	VA	28.21
39	INDIANAPOLIS	IN	28.17
40	SALT LAKE CITY	UT	28.02
41	FORT LAUDERDALE	FL	28.01
42	SAN JOSE	CA	28.00
43	NASHVILLE	TN	27.99
44	PITTSBURGH	PA	27.99
45	OAKLAND	CA	27.98
46	MILWAUKEE	WI	27.91
47	SPRINGFIELD	IL	27.90
48	RENO	NV	27.90
49	TACOMA	WA	27.87
50	AUSTIN	TX	27.81
51	ALBUQUERQUE	NM	27.81
52	DAYTON	OH	27.74
53	MEMPHIS	TN	27.69
54	SACRAMENTO	CA	27.64
55	CHARLESTON	SC	27.53
56	TOLEDO	OH	27.48
57	TULSA	OK	27.41
58	FRESNO	CA	27.24
59	RIVERSIDE	CA	27.22
60	GREENVILLE	SC	27.14
61	RICHMOND	VA	27.13

62	SAVANNAH	GA	27.04
63	GREENSBORO/WINSTON/SALEM	NC	26.95
64	JACKSONVILLE	FL	26.90
65	WILMINGTON/OCEAN CITY	MD	26.87
66	KNOXVILLE	TN	26.72
67	MYRTLE BEACH	SC	26.72
68	SALINAS/MONTEREY	CA	26.71
69	OMAHA	NE	26.66
70	OKLAHOMA CITY	OK	26.65
71	ROCHESTER	MN	26.64
72	GALVESTON	TX	26.61
73	BATON ROUGE	LA	26.58
74	MACON	GA	26.48
75	HUNTINGTON	WV	26.46
76	PROVIDENCE	RI	26.45
77	WICHITA	KS	26.40
78	TOPEKA	KS	26.40
79	CORPUS CHRISTI	TX	26.39
80	EL PASO	TX	26.39
81	BIRMINGHAM	AL	26.37
82	BOISE	ID	26.32
83	NASSAU/UNIONDALE	NY	26.30
84	LITTLE ROCK	AR	26.30
85	BUFFALO	NY	26.29
86	DULUTH	GA	26.25
87	MOBILE	AL	26.25
88	BILOXI	MS	26.08
89	MONTGOMERY	AL	26.08
90	FORT WAYNE	IN	26.05
91	LUBBOCK	TX	26.05
92	SPOKANE	WA	25.99
93	SYRACUSE	NY	25.98
94	DAYTONA BEACH	FL	25.92
95	VISALIA	CA	25.89
96	PEORIA	IL	25.87
97	FORT MYERS	FL	25.83
98	CHARLESTON	WV	25.83
99	GRAND RAPIDS	MI	25.82
100	SHREVEPORT	LA	25.78
101	SANTA FE	NM	25.77
102	EUGENE	OR	25.76
103	ABILENE	TX	25.75

104	CHATTANOOGA	TN	25.71
105	ANCHORAGE	AK	25.70
106	MADISON	WI	25.62
107	WHEELING	WV	25.59
108	ASHEVILLE	NC	25.49
109	WORCESTER	MA	25.48
110	ROCHESTER	NY	25.46
111	DES MOINES	IA	25.41
112	LINCOLN	NE	25.33
113	COLUMBIA	SC	25.28
114	HARTFORD	CT	25.27
115	LEXINGTON	KY	25.16
116	LANSING	MI	25.00
117	EVANSVILLE	IN	24.96
118	SAGINAW	MI	24.94
119	BAKERSFIELD	CA	24.90
120	ALBANY	NY	24.87
121	MOLINE/ROCK ISLAND/DAVENPORT	IL	24.84
122	VENTURA	CA	24.83
123	MONROE	LA	24.77
124	CASPER	WY	24.68
125	AUGUSTA	GA	24.67
126	HUNTSVILLE	AL	24.65
127	JACKSON	MS	24.60
128	LAFAYETTE	LA	24.55
129	CEDAR RAPIDS	IA	24.32
130	SPRINGFIELD	MA	23.79
131	GREEN BAY	WI	23.63
132	FORT SMITH	AR	23.47
133	SIOUX FALLS	SD	23.32
134	FORT WALTON	FL	23.20
135	PORTLAND	ME	22.95
136	RAPID CITY	SD	22.63
137	BISMARCK	ND	20.69

## Perceived Impacts of Gambling: Integration of Two Theories

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### Abstract

This study explores the race and educational attainment variations on resident perceptions and support for a proposed casino development. In addition, it investigates the influence of perceived benefits and costs on support. The findings indicate that residents who are likely to receive personal benefits tend to believe that casino development's socioeconomic benefits outweigh the associated costs. Respondents' race is found to exercise significant influence on their perceptions of benefits and costs and support. This study integrates two separate research streams of social exchange theory and social representation theory, and in doing so makes a major theoretical contribution in tourism literature.

**Key Words:** casino gambling, social exchange theory, social representation theory, local residents

### Introduction

Gaming has grown in popularity over the last several years and has been characterized as the most significant occurrence affecting the tourism industry of the United States. As the number of gaming casinos has increased, studies examining the social and economic impacts of gaming have also shown a rapid increase. As stated by Ham, Brown and Jang (2004), many local governments have taken a favorable view of casinos in the context of economic benefits. However, many have stated that the reputation of gambling as a magic mantra for prosperity is overstated (Jinkner-Lloyd 1996). Literature has often proposed two polarized views to explain gambling effects. The first supports the "economic boosterism" model, which suggest that gambling stimulates local economy overshadowing the negative effects (Stokowski 1996). The second hypothesis states that gambling brings social disruption (Tosun 2002). It produces an extensive negative change in the social fabric of the community in terms of crime, bankruptcy, and social pathologies.

Much of the literature has classified residents' attitudes toward casino gaming in three main benefit and cost domains: economic, sociocultural, and environmental (Ham, Brown and Jang 2004; Tosun 2002). Most of these studies have shown that these domains are the key factors that influence locals' support and/or opposition for casino gaming in their community. Most of them examined the residents attitudes in the context of the Social Exchange Theory (SET), which suggests that residents are likely to support development as long as the perceived benefits exceed the perceived costs. However, residents' characteristics are also likely to influence how they perceive the impacts of gaming development. Therefore, this study suggests that examining residents' attitudes toward gaming in the context of SET alone may not suffice to explain resident support for tourism. As suggested by the social representation theory (SRT), examining community characteristics such as race and educational attainment are also important to understand the factors that are likely to influence support.

This study attempts to examine the residents' attitudes and their opposition/support for a casino gaming development prior to the development of a casino in the Black Hawk County of Iowa (United States) utilizing both SET and SRT. Even though the impacts of casino gaming have been examined by previous studies, this study distinguishes itself in four ways: it is one of the few studies that looks at the impact perceptions of a riverboat casino prior to its development; it analyzes the race and educational attainment influence on socioeconomic perceptions; it explores race variations in casino gambling support; and finally, it is one of the first studies conducted in the Black Hawk County on the race and educational attainment differences in perceptions. The focus of this study is the African Americans and the White Americans who reside in the Black Hawk County and the educational attainment of the community.

### Resident Support Theories and Gambling

Most of the studies that examined residents' support for any form of tourism development have used SET as a predominant theoretical base (Gursoy and Rutherford 2004; Gursoy, Jurowski and Uysal 2002; Sirakaya, Teye and Sonmez 2002). Basic tenet of the SET is that locals are likely to participate in an exchange if they believe that they are likely to gain benefits without incurring unacceptable costs. If locals perceive that the benefits are greater than the costs, they are inclined to be involved in the exchange and, thus endorse future development in their community (Gursoy and Rutherford 2004). Thus, SET suggests that people analyze and review an exchange based on the benefits and costs derived from the change.

“Residents who perceive themselves as benefiting from tourism are likely to view it positively, while residents who perceive themselves as incurring costs are likely to view tourism as negatively (McGhee and Andereck 2004: 134). However, Gursoy and Rutherford (2004) suggest that these benefits and cost perceptions of impacts are not mutually exclusive. A change in perceptions of one type of impact is likely to influence the perceptions of other types. If residents perceive one impact factor as more important than others, it is likely that the perception of that impact factor will influence the perceptions of other impact factors. For example, if one has a very strong perception of economic benefits, this is likely to influence his/her perceptions of social and cultural impacts. In other words, the most salient perceived impact is likely to influence the perception of all other impacts.

SRT is concerned with “describing and understanding how and what people think in their ongoing everyday experiences and how a wider social reality influences these thoughts. Social representations can be seen as incorporating the stock of common knowledge” (Pearce, Moscardo and Ross 1996, p. 36). Social representations can be described as myths, knowledge, images, ideas, and thoughts about something that is a matter of social interest in tourism (Moscovici 1981). According to Fredline and Faulkner (2000), representations are homogenous across people within a group even though all groups might not be constant and adhesive. Community groups need to be identified to understand their perceptions. This study uses race and educational attainment to identify community groups. Previous studies suggest that racial characteristics (Faulkner and Tideswell 1997) and educational attainment of community members (Hsu 1998) can have a significant influence on local perceptions of impacts and on their support/opposition for any form of tourism development.

### **Theoretical frameworks in the context of casino gambling impacts**

Most of the studies mentioned above have discussed resident support for existing casinos or proposed casinos in the context of social exchange theory. However, literature provides mixed support for this theory. The contradictory findings may be explained by the fact that, as Andriotis and Vaughan (2003) postulate, from the an economic point of view, social exchange theory may be associated with growth machine theory, which suggests a favorable disposition of residents towards tourists, tourism, and its growth who profit from development. This view is also supported by others such as Madrigal (1995) and Martin (1996). Caneday and Zeiger (1991) findings provides further support for this view that residents perceptions of social and economic impacts of gaming and their support is likely to be influenced by the fact whether they receive personal benefits from it. On the other hand, Pizam and Pokela (1985) reported a lack a support for casino gaming when they examined the attitudes of all residents. They argued that residents’ lack of support suggest that the residents did not believe that jobs created by the casinos would improve their standard of living (Ham et al. 2004). These contradictory findings suggest that other factors are likely to influence residents’ support for casino gaming and how they view the impacts of casino gaming on their local communities. For example, previous studies suggested that locals’ education level and their length of residency are likely to mediate their perception of casino gaming and influence the level of support (Hsu 1998).

Based on the previous discussion, this study proposes a gambling tourism support model (GTSM), which combines both the SET and SRT. The proposed model suggests that the level of residents’ positive and negative perceptions are likely to influence their support/opposition for gaming development. However, their perceptions are likely to be mediated by the expected personal benefits. Model also proposes that community characteristics are likely to influence residents’ perceptions through expected personal benefits and also likely to have direct impact on support/opposition. In the proposed model, residents’ positive and negative perceptions and the expected benefits from the development represent the SET and community characteristics represent the SRT. The proposed model is tested utilizing regression analysis to measure the influences of various personal characteristics on impact perceptions, and the influence of both the personal characteristics and perceptions on support for proposed gaming development. In order to provide further support, other characteristics of the community such as age, gender, and annual household income of each community respondent are included in the regression analysis.

### **Methodology**

Data were collected in the fall of 2004 through a multiple sampling technique, which involved brief intercepts, self-administered questionnaires, and a snow-ball method. During the contact, each member of the sample was informed of the study purpose and assured anonymity. The survey was conducted with a stratified sample of 408 households. This number was equally distributed among the African American and White American population groups and proportionally distributed in the upper and middle class segments of each population group.

The survey was pre-tested and further refined before the collection of the data. The instrument used to gather data for this study was a questionnaire, which included 32 items representing resident attitudes towards the proposed casino development in the Black Hawk County of Iowa. The items were posed in both in positive and negative voices and the



residents were asked to agree or disagree with the items. The levels of agreement were indicated on a 5-point Likert-type scale ranging from 5= strongly agree and 1= strongly disagree. The study items were associated with casino gambling economic and sociocultural impacts. These were derived from various studies in literature (Ap and Crompton 2001; Gursoy and Rutherford 2004; Purdue, Long and Kang 1999).

Data were analyzed using multiple methods. Univariate analysis provided descriptive statistics for all the variables. To detect scale dimensionality, an exploratory factor analysis (EFA) with a principal component method with varimax rotation was conducted. The appropriateness of factor analysis is determined by examining the Kaiser-Meyer-Olkin measure of sampling adequacy and the Bartlett's test of sphericity. In order to make sure that each factor identified by EFA has only one dimension and each attribute loads only on one factor, attributes that had factor loadings of lower than .50 and attributes loading on more than one factor with a loading score of equal to or greater than .50 on each factor were eliminated from the analysis (Hattie 1985). Reliability analysis of the items was performed in two stages. The first stage was directed at the Cronbach alpha coefficient and the second stage focused on the evaluation of item-to-item correlation scores of the items in each scale (factor analysis). The Cronbach alpha coefficients were within the recommended level of .60 and .70 (Nunnally and Bernstein 1994). The factor analysis with varimax rotation was used to determine variances among the items

Multiple regressions were used to examine the effect variables used in the study on support for casino development while controlling for age, gender, income, and number of children in the household. Social representation was represented by the educational attainment and the race variables. The race variable was dichotomous with African Americans = 1 and White Americans = 0. The education variable was a polytomous variable because it had more than two categories. Grad school was a dummy variable with grad school =1 and the rest of the education categories = 0, secondary school was a dummy variable with secondary school =1 and the rest =0, high school diploma was a dummy variable with high school diploma=1 and the rest =0, bachelor's degree was a dummy variable with bachelors degree= 1 and the rest =0, and masters or doctorate degree was a dummy variable with masters or doctorate degree = 1 and the rest of the education categories = 0. SET was represented by the following scales: social benefits, social costs, economic benefits, economic costs, infrastructure benefits, infrastructure costs, and environment costs. The casino development was a likert scale item stating "I am glad we are going to have a casino on our area." Some of the controlled variables were dummy variables. Gender was a dummy variable with male=1 and female=0, less than \$50,000 income was a dummy variable with less than \$50,000=1 and the rest =0, between \$50,000 and \$99,999 was a dummy variable with between \$50,000 and \$99,999 =1 and the rest =0, between \$100,000 and \$149,999 was a dummy variable with between \$100,000 and \$149,999=1 and the rest=0, and above \$150,000 was a dummy variable with above \$150,000 =1 and the rest =0. Age and number of children in the household were continuous variables.

## Study Results

Examination of the demographic characteristics of the respondents indicated that there were more female respondents among the White Americans (56.0%) than the African Americans (52.0%). The annual household income of majority of the African Americans was less than \$50,000 while the majority of the White Americans earned an annual household income between \$50,000 and \$99,999. Approximately 18% of the White Americans were in the above \$100,000 category compared to the African Americans (6%). Children per household and household size were approximately similar for both the population groups.

Thirty-two variables represented perceptions of the respondents. The results indicate that the African Americans in general agreed more with the benefits and disagreed more with the costs than the White Americans. The items the African Americans were the most supportive about were associated with economic benefits. With regard to social costs such as borrowing money to gamble and assumed bankruptcies resulting from gambling, the White Americans were more concerned than the African Americans.

The result of the principle component factor analysis with varimax rotation indicated that there were seven underlying dimensions (factors): the first dimension (factor) accounts for 31.7% of the variance, the second dimension (factor) accounts for 8.7%, the third dimension (factor) accounts for 6.7%, the fourth dimension (factor) accounts for 5.8%, the fifth dimension (factor) accounts for 4.4% and the sixth dimension (factor) accounts for 4.3% and the seventh dimension accounts for 3.6%. All the loadings were positive. The first dimension was named Social costs, the second dimension was named Infrastructure costs, the third dimension was named Social benefits, the fourth dimension was named Infrastructure benefits, the fifth dimension was named Economic costs, the sixth dimension was named Environment Costs, and the seventh dimension was named Economic benefits. In addition, two perceptions were used for this study that enquired about the personal social and economic benefits perceived by the respondents. These were not included in the factor analysis.

Influence of perceived personal social and economic benefits on the seven dimensions (factors) was examined using bivariate regression analyses. All the models found to be significant at  $p \leq .05$ . The results revealed that perceived personal benefits significantly influence residents' attitudes towards general socioeconomic benefits. In addition, they also reduced the perceptions of costs associated with gambling. Next, influence of race on these perceptions was examined. Race was regressed on all seven-perception categories that represented benefits and costs while controlling for age, gender, and annual household income. Three out of seven regression models were significant. African Americans disagreed more than the Whites on social costs while no racial differences were observed on perceptions of economic benefits and costs and infrastructure benefits. The African Americans perceived infrastructure costs to be less than the Whites. However, no differences were observed between the two population groups with regard to environment costs. In other words, the African Americans and White Americans perceived similar benefits with regard to the economy and infrastructure. Both the groups also perceived similar environment costs.

Finally, nine multiple regression models were used to determine the influence of benefits, costs, race, and socioeconomic characteristics on the support for a proposed casino in Black Hawk County while controlling for age, gender, and annual household income. Findings indicated that all models, except the environment costs model, were highly significant at  $p \leq .05$ . Respondents who disagreed more with the social costs supported the proposition while controlling for age, gender, and income. The social cost model also revealed that respondents with an annual household income between \$100,000 and \$150,000 differed in their support for the proposed casino while controlling for social costs. The first income group had a tendency to show higher support. Conversely, respondents who agreed more with the benefits tended to support the casino while controlling for demographics. However, support for the casino was equally divided among the proponents and opponents of environmental costs. With regard to race, African Americans agreed more with the statement that they were glad that their area would have a casino while controlling for age, gender, and annual household income. No differences in proposed casino support were observed among the respondents with different education levels while controlling for demographic variables.

## Discussion

One of the major theoretical contributions of this study is that this study integrates both SET and SRT in a single model to better understand local residents support for gambling development. This study conducts an analysis of local resident perceptions based upon race and education levels. It further investigates causes of tourism development support in the context of SRT and SET. This study investigated the influence of personal and general benefits on the proposed casino support. Findings indicated that residents who are likely to receive personal benefits from gambling development tend to believe that socioeconomic benefits of gambling development outweighs the associated costs compared to others. These findings are consistent with the previous studies, which suggest higher the personal benefits, higher the support. This finding also support previous assertions that locals are likely to participate in an exchange as long as they believe that the expected benefits outweighs the expected costs as suggested by the SET. The influence of personal benefits from casino development on local resident perceptions of impacts and their support for development was examined by controlling for demographics effects of age, gender etc. Controlling the affects of other demographic variables further advanced the understanding of the impact of personal benefits and provided further support for the applicability of SET.

This study also examined the influence of race and education level of locals. Findings indicated that respondents' race has a significant influence on their perceptions of sociocultural impacts (positive and negative) and infrastructure costs. Findings suggested that while there were no differences between the perceptions of benefits between African Americans and White Americans, African Americans tend to view social and infrastructure costs associated with the gambling development as less important. This maybe explained by the fact that African Americans believe that they are more likely to receive personal benefits from the development as suggested by the findings, which suggest that respondents' race has significant impact on their perceptions of personal benefits. The difference in perceptions of costs between two groups examined may also be explained by the differences in income levels of those two groups. As discussed earlier, African Americans income level is relatively lower than White Americans. Thus, they may believe that gambling development in the area may provide opportunities for them to improve their standard of living by providing personal benefits such as jobs that is likely to increase their income level. Findings also suggested that the respondents' race is likely to have a significant impact on their support for proposed gaming development. Again, this finding may be explained by the expected personal benefits and differences in income between those two ethnic groups. However, no differences were observed among respondents with different education levels.

Previous studies that utilized SET as the theoretical base have not distinguished between personal benefits and general benefits for the community. A critical factor revealed by this study is that personal benefits significantly influence locals' perceptions of general benefits. Residents who are likely to receive personal benefits from the casino development

are likely to be strongest supporters of the development. This finding suggests that communities investigated may be willing to enter the exchange process if the potential for personal economic and social gains are considerable. Identification of residents who believe that they are likely to receive personal benefits from the development may help planners and developer in convincing other residents about the benefits of casino development. Developers and planners can utilize those residents in their internal marketing efforts to change the opinion of residents who feel that they have little to gain from casino development by promoting the positive economic and social benefits of development on one-to-one and face-to-face bases.

The findings of this study may aid in the planning of strategic development programs for communities that are planning on developing gaming attractions. The proposed model can also be applied in communities in various stages of gaming attraction development to identify factors that need to be addressed in economic and social development programs. In order to assess the value of alternative development plans, developers and supporters of gaming development need a better understanding of what is important to the individuals within a community. Once developers identify what is important to the individuals within a community, they may apply the principles of internal marketing to solicit support from the community for their endeavors. The information provided may assist in the design of more effective communication messages once knowledge concerning the values of the audience are revealed.

### Conclusions

Proliferation of legal gambling has been a subject of study for several decades. Legal gambling as an alternative form of recreation has been the most significant phenomenon affecting the tourism industry in the United States (Diamanche and Speyrer 1996). The major motivation behind gambling expansion has been economic need. According to Perdue, Long and Kang (1995), the current wave of fiscal constraints at the state and local level has led to the current wave of pro-gambling sentiment. Several studies have shown that gambling can be highly profitable (Hsu 2000; Perdue et al. 1995; Pizam and Pokela 1985; Roehl 1994). However, several studies have also highlighted the repercussions of gambling (Caneday and Zeiger 1991; Hsu 2000; Stokowski 1996). Thus, communities and organizations seeking to develop or increase gambling tourism should realize that the issue of local residents support for gambling is very complex. As suggested by previous studies, resident attitudes of casino gaming are not homogenous. Findings of this study lend credence to earlier findings. Findings further suggests that the extent to which local residents support or oppose casino gaming development in their community does not only depend on their perceptions of how it affects their own personal welfare or community welfare, but also depends on how it may affect the community's social fabric and culture to a great extent.

The first step in understanding the perceptions and attitudes of locals towards gambling tourism impacts is determining the areas of support and concern, impact of those areas on support and the factors that are likely to influence those perceptions and attitudes. Therefore, the results of this study can be valuable to local planners, policy makers and business operators as they consider the type, size and complexity of gambling tourism development. Findings of this study can easily be used to further understand the genesis of these perceptions; planners have additional information to help guide developments more consistently congruent with local attitudes.

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## **Impacts of Organizational Responses on Complainants' Justice Perceptions and Post-Purchase Behaviors**

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### **Abstract**

This study examined the impacts of organizational responses on complainants' justice perceptions and post-purchase behaviors. Specifically, the impacts of apology, redress, explanation, attentiveness, facilitation, effort and promptness on complainant's justice perceptions were measured. Furthermore, the effects of the justice perceptions on complainants' satisfaction, repurchase and word-of-mouth intentions were analyzed using a sample of international tourists visiting North Cyprus. The findings demonstrated that organizational responses had a strong effect on justice perceptions and distributive justice had the largest effect on complainants' satisfaction. Complainant satisfaction was found to have the strongest impact on repurchase intention and negative WOM communication.

**Key Words:** customer complaints, organizational responses, justice perceptions, post-repurchase behaviors

### **Introduction**

In an era of intense competition, service organizations are trying to differentiate themselves from their competitors by providing exceptional services that will deliver distinct benefits to their target markets (Kotler, Bowen and Makens, 1999). However, mistakes and failures are frequent occurrences in service businesses even though service firms constantly seek effective solutions to minimize the number of mistakes and failures in the service encounter (Babakus et al., 2003). When the failures occur customers are likely to complain. These occasional service problems may not dissolve the relationship between the customer and the organization, but the complaint situation may present an opportunity, a "moment of truth", to the management that can be used to strengthen the relationship with the customer if responded to and managed appropriately. Service recovery is a specific activity in which a company engages to address a customer complaint regarding a perceived service failure (Spreng, Harrell and Mackoy, 1995). Previous studies suggest that a successful service recovery is likely to have a significant impact on customer satisfaction and their post-purchase behaviors (Yavas et al., 2003). "Good service recovery can turn angry customers into loyal ones. In fact, good recovery can win more customer purchasing and loyalty than if things had gone well in the first place" (Kotler, Bowen, and Makens 1999, pp. 47).

Literature suggests that organizational responses to complaints and/or effective service recovery heavily rely on company's attentiveness to the problem, facilitation and effort to solve it, promptness, redress, apology and explanation (Davidow, 2000; Yavas et al., 2003). However, studies suggest that a dissatisfied customer's willingness to complain is likely to be influenced by his/her justice perceptions, namely: procedural, interactional and distributive justice. These justice perceptions/dimensions are likely to have direct impacts on complainant satisfaction, repurchase intentions and word of mouth (WOM) communication (Davidow, 2003b; Ekiz et al., 2005).

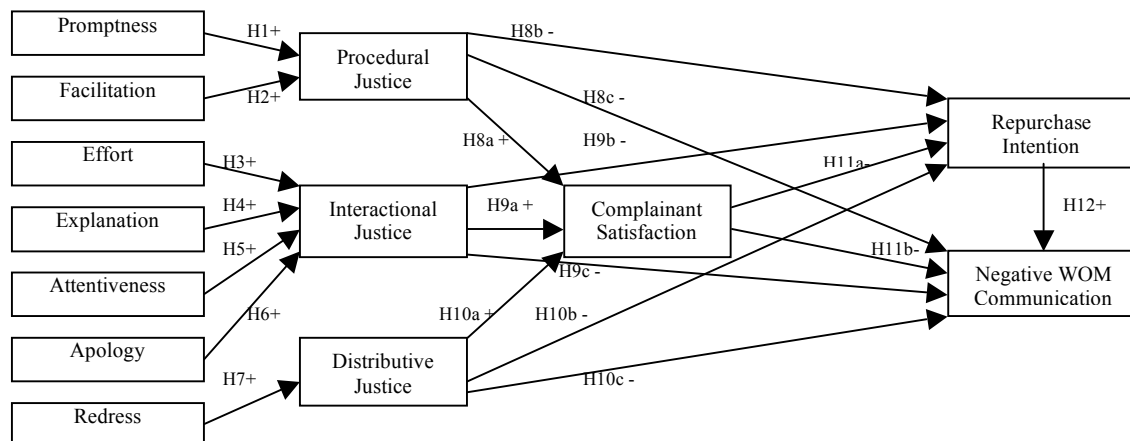
This study aimed to assess the impacts of apology, redress, explanation, attentiveness, facilitation, effort and promptness on complainant's justice perceptions, i.e. distributive, procedural and interactional justice. Furthermore, the effects of these justice perceptions on complainants' satisfaction, repurchase and word of mouth communication intentions were examined through the use of a sample of international tourists staying in three, four, and five star hotels in North Cyprus. This study is useful for at least two reasons. First, a growing body of research shows that the issue of service recovery is at the development stage in tourism and hospitality literature (Becker, 2000), little is known about the effects of organizational responses to justice perceptions, and the effects of justice perceptions on customer complaints, customer satisfaction, repurchase intentions and negative WOM communication (Maxham III and Netemeyer, 2002), and there is a paucity of empirical research in this area. Second, as well as contributing to the existing body of knowledge, this study has important implications at both micro and macro levels. Tourism and hospitality industry is the lifeblood of North Cyprus economy, having a significant portion in the overall Gross National Product (Economic and Social Indicators, 2004). Therefore, these issues are of great interests to both public officials and hotel managers in tourism and hospitality industry.

### Proposed Conceptual Model

Prior studies suggest that high levels of complainant satisfaction are associated with increased repurchase intention, actual repurchase and decreased negative WOM (Davidow, 2000; Karatepe and Ekiz, 2004). Studies indicate that satisfied complainants are more likely to have repurchase intentions and use positive word-of-mouth communication (Ekiz, Arasli and Bavik, 2005; Maxham III and Netemeyer, 2002). Organizational responses to service failures or customer complaints can have positive or negative impacts on the service recovery and complainant satisfaction. For example, a poor interaction with a rude representative or a bad organizational policy while filing the complaint or a mismatch of cost and compensation at the end of the recovery process can cause negative WOM (Davidow, 2003b). In order to better understand the impact of organizational responses on service recovery and complaint handling, the following model was proposed.

The model proposed that organizational responses such as apology, redress, explanation, attentiveness, facilitation, effort and promptness were likely to have significant impact on complainant's justice perceptions, i.e. distributive, procedural and interactional justice. Furthermore, as presented in Figure 1, the model suggested that these justice perceptions in turn affected complainants' satisfaction, repurchase and word of mouth communication intentions. A detailed discussion of the constructs in the model was presented in the literature review section.

Figure 1  
Conceptual Model



- H1: Promptness will have a significant positive effect on procedural justice.  
 H2: Facilitation will have a significant positive effect on procedural justice.  
 H3: Effort will have a significant positive effect on interactional justice.  
 H4: Explanation will have a significant positive effect on interactional justice.  
 H5: Attentiveness will have a significant positive effect on interactional justice.  
 H6: Apology will have a significant positive effect on interactional justice.  
 H7: Redress will have a significant positive effect on distributive justice.  
 H8a: Procedural justice is positively related to complainant satisfaction.  
 H8b: Procedural justice is negatively related to repurchase intention.  
 H8c: Procedural justice is negatively related to negative WOM communication.  
 H9a: Interactional justice is positively related to complainant satisfaction.  
 H9b: Interactional justice is negatively related to repurchase intention.  
 H9c: Interactional justice is negatively related to negative WOM communication.  
 H10a: Distributive justice is positively related to complainant satisfaction.  
 H10b: Distributive justice is negatively related to repurchase intention.  
 H10c: Distributive justice is negatively related to negative WOM communication.  
 H11a: Complainant satisfaction will exert a significant negative influence on repurchase intention.  
 H11b: Complainant satisfaction will exert a significant negative influence on negative WOM communication.  
 H12: Repurchase intention is positively related to negative WOM communication.

## Literature Review

### *Organizational Responses*

Organization responses to service failures and customer complaints vary from company to company. Some of the organizational responses examined in the literature include an apology, facilitation, explanation, redress, effort, attentiveness and promptness. *Apology* is a psychological exchange, what is offered in exchange for the inconvenience or problem the customers faced. Boshoff and Leong (1998) report that apologizing for the inconvenience, as a first step towards re-establishing the equilibrium plays an important role in customer satisfaction with a firm's service recovery effort. *Facilitation* refers to "the policies, procedures, and tools that a service firm has in place to support customer complaints" (Davidow, 2000, p. 475). *Explanation* basically refers to information given by the service provider about why the problem occurred. Appropriate provision of explanation reduces the recipient's perceptions of injustice and, in turn, affects recipient satisfaction and loyalty (Dunning and Pecotich, 2000). *Redress* refers to the "fair settlement or fix" of the problems that arise between company and the customer (Diener and Greyser, 1978). Blodgett, Wakefield and Barnes (1995) stated that customers, who receive a fair settlement, are satisfied and more likely to show re-patronage. *Effort* refers to the force, energy, or activity by which work is accomplished. Therefore, effort can be conceptualized as the amount of positive energy spent by frontline employees for recovering service failures (Karatepe, 2005). *Attentiveness* is the interaction and communication between the company staff and the complainant. Davidow (2003a) argues that this interaction is the key construct and can enhance or detract from complainant satisfaction, repurchase intention and negative WOM. *Promptness* represents the fairness of the organization in responding to the customer complaints on a timely manner. Kincade, Redwine and Hancock (1992) reported that the speed of the response is very important in affecting consumers' satisfaction and repurchase behaviors.

### *Perceived Justice*

Davidow (2003b, p. 69) defines perceived justice as "a sequence of events in which a procedure generates a process of interaction and decision making through which an outcome is allocated to someone." Perceived justice suggests that the following factors are all critical in recovery evaluation: the recovery process itself; the outcomes connected to the recovery strategy; the interpersonal behaviors enacted during the recovery process and the delivery of outcomes (Hoffman and Kelly, 2000). For this reason, researchers frequently use the justice dimensions to further explain the relationship between service recovery activities and post purchase customer behaviors (Davidow, 2003a; Ekiz et al., 2005). Davidow (2003b) suggests that perceived justice has three dimensions: distributive, interactional and procedural.

### Procedural Justice

Maxham III and Netemeyer (2002, p. 240) defined procedural justice as "perceived fairness of policies and procedures involving the recovery effort", and they found anecdotal evidence suggesting that procedural justice affects service recovery outcomes. Hoffman and Kelley (2000) stated that procedural justice examines the process that is undertaken to arrive at the final outcome, hence they claimed that even though a customer may be satisfied with the type of recovery strategy offered, recovery evaluation may be poor due to the process endured to obtain the recovery outcome. Fairness of the policies and procedures by which the outcome is produced can be considered as a just procedure.

### Interactional Justice

Davidow (2003b, p. 70) defined interactional justice as "fairness relates to the interpersonal communications in the decision making process". Interactional justice refers to the manner in which the customer is treated during the recovery process and it includes: courtesy, empathy, politeness, concern and neutrality (Mattila and Patterson, 2004; Smith, Bolton and Wagner, 1999; Tax, Brown and Chandrashekar, 1998). Collie, Sparks and Bradley (2000) argues that interpersonal treatment during a conflict resolution process is perceived as a positive attempt to solve the problem and has important positive impact on overall justice perception of complainant in service recovery.

### Distributive Justice

The distributive justice focuses on the perceived fairness of the outcomes of the service encounter, in other words, what specifically a firm offers to a customer to recover from a service failure (Schoefer and Ennew, 2005; Blodgett, Granbois and Walters, 1993). In a consumer complaint context, distributive justice refers to the perceived fairness of the policies and procedures used by the seller (Blodgett, Hill and Tax, 1997). "Distributive justice outcomes may be evaluated in terms of refunds, free gifts, coupons and offers to mend in response to inequity resulting from a service failure" (Karatepe, 2005, p. 7).

### *Complainant Satisfaction*

Yi (1990) proposes three types of definitions of satisfaction as an outcome or as a process. These definitions include: “the buyer’s cognitive state of being adequately or inadequately rewarded for the sacrifices he has undergone”; “an emotional response to the experiences provided by retail outlets, associated with particular products or services purchased there”; and “the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer’s prior feelings about the consumptions change” (Yi, 1990, p. 69).

### *Repurchase Intension and WOM Communication*

Repurchase intent and WOM communication are considered to be salient consequences of complaint satisfaction in the post purchase behavior literature. Maxham III and Netemeyer (2002) defined WOM intent as “the likelihood that one would favorably recommend a firm’s product or service after a failure and recovery effort”, and repurchase intent as “the degree to which customers intend to purchase a firm’s products/services in the future” (p. 242).

### **Methodology**

Data for this study were collected from tourists who stay in three, four, and five star hotels between June and November 2005 in North Cyprus. Specifically, data were gathered from customers who had complaints and reported them to the hotel during their stay. Self-administrated questionnaires were personally distributed to hotel customers, and they were given assurance for confidentiality. Of the 600 questionnaires distributed, 346 usable questionnaires were retrieved with a response rate of 57.7 percent.

The current study employed a modified version of the scales developed by Davidow (2000; 2003b) to operationalize the model depicted in Figure 1. The questionnaire items were originally prepared in English and then translated into German for the convenience of German speaking tourists by using a back-translation method (McGorry, 2000). Responses to the items were elicited on 5-point scales ranging from “5 = strongly agree” to “1 = strongly disagree.” The instrument was tested through a pilot study. The psychometric properties of the instrument were assessed by examining reliability dimensionality, convergent and discriminant validity. Reliability coefficients were also computed for each study variable. Overall Alpha coefficient score was found to be 0.94 at the aggregate level. These findings show that each coefficient exceeds the cut-off value of 0.70 as recommended by Nunnally (1978), as were the cases with those of Davidow (2000; 2003b). Convergent validity was assessed by examining the corrected item-total correlations. The inter-item correlations being equal to or exceeding 0.32 provided support for the convergent validity of the scale (Tabachnick and Fidell, 1996). A confirmatory factor analysis was employed to assess the appropriateness of the measurement model. Results of the confirmatory factor analysis indicated a reasonable fit of the eight-factor model to the data. The majority of the factor loadings are above 0.70, and all t-values are significant. Overall, these results provide support for the dimensionality, convergent and discriminant validity of the scale (Anderson and Gerbing, 1988).

### **Tests of Research Hypotheses**

The hypothesized relationships were tested using a path analysis (Joreskog and Sorbom, 1996). Findings suggested that all hypothesized relationships were supported, except for hypothesis 8c, which proposed a negative relationship between procedural justice and negative WOM communication. Consistent with the prior studies (Davidow, 2003b; Karatepe, 2005), apology, promptness, explanation, attentiveness, facilitation, effort and redress were found to be positively related to the underlying justice dimensions. Thus, the hypotheses 1, 2, 3, 4, 5, 6 and 7 were supported. As proposed, findings indicated that all perceived justice dimensions were positively related to the complainant satisfaction, which provided support for hypotheses 8a, 9a and 10a. Hypotheses that proposed negative effects from the justice dimensions and from complainant satisfaction to repurchase intension were supported (hypotheses 8b, 9b, 10b and 11a). The justice dimensions and complainant satisfaction were found to be negatively related to the negative WOM. Thus, hypotheses 9c, 10c and 11b were supported where 8c was rejected due to its low t-value (Nunnally, 1978). Finally, findings indicated that negative WOM was positively affected by the repurchase intention. Hence, hypothesis 12 was supported.

### **Discussion**

Findings revealed that the established scales provided sound psychometric properties. Broadly speaking, the instrument was found to have convergent and discriminant validity as well as acceptable reliability coefficients. As for the hypothesized relationships, all hypotheses were supported except for one. More specifically, path analysis results demonstrated that promptness and facilitation depicted a significant positive relationship with procedural justice. This meant that speedy response was a key to successful complaint management; and availability of well-established policies and procedures were directly related to the complainants’ perceptions of procedural justice. These findings were consistent with that of Karatepe (2005) and Davidow (2003b). Empirical evidence indicated that effort, explanation, attentiveness, and apology had significant positive impact on interactional justice. When a hotel representative spends constructive effort and provide complainants with reasonable information about why the problem has occurred and what will be done to resolve

that problem, complainants will at least understand that the hotel is aware of the problem and is doing its best to solve it. Moreover, complainants expect hotel representatives to provide a sincere care and treat with respect, as well as a sincere apology. These findings were consistent with those of Conlon and Murray (1996), Goodwin and Ross (1989), Davidow (2003b) and Karatepe (2005). Path analysis results demonstrated that there was a significant positive relationship between redress and distributive justice. This outcome was consistent with those of Blodgett, Granbois and Walters (1993) and Karatepe (2005).

Path analysis provided empirical support for the significant positive relationships among justice dimensions and complainant satisfaction. Also, empirical evidence indicated that justice dimensions and complainant satisfaction had significant negative relationships with both repurchase intention and negative WOM communication, except for the relationship between procedural justice and negative WOM, which was found to be negative as hypothesized, but the significance level was slightly below the recommended value (Nunnally, 1978). Finally, the relationship between repurchase intention and negative WOM communication was found to be significant and positive. These relationships were consistent with those of Karatepe (2005), Blodgett, Granbois and Walters (1993), Ekiz et. al. (2005), Maxham III and Netemeyer (2002), McCollough (2000), Schoefer and Ennew (2005) and Blodgett, Hill and Tax (1997).

Comparison of the effects of organizational responses on related justice dimensions suggested that promptness had the highest significant positive effect on procedural justice ( $\beta = 0.64$ ,  $t = 17.53$ ), where apology was found to have the highest significant positive effect on interactional justice ( $\beta = 0.67$ ,  $t = 21.66$ ). Redress had significant positive effect on distributive justice ( $\beta = 0.36$ ,  $t = 11.25$ ). Distributive justice was found to have the highest significant positive effect on complainant satisfaction ( $\beta = 0.62$ ,  $t = 25.57$ ). Karatepe (2005), Smith, Bolton and Wagner (1999) and Maxham III and Netemeyer (2002) found the most influential justice dimension on complainant satisfaction as interactional. This study found distributive justice as the most influential justice dimension on complainant satisfaction.

When the rest of the relationships analyzed it can be seen that complainant satisfaction had the highest significant negative effect on both repurchase intention (with  $\beta = -0.45$ ,  $t = -11.73$ ) and negative WOM communication (with  $\beta = -0.53$ ,  $t = -9.22$ ). The outcome dimensions in this study were negative in nature so the relationships occurred negatively as hypothesized. When the other hypothesized relationships were examined, evidence revealed that complainant satisfaction exerted a significant positive effect on repurchase intentions and negative effect on negative WOM, as predicted. Consistent with other studies (Ekiz et. al. 2005, Maxham III and Netemeyer, 2002, McCollough, 2000, Schoefer and Ennew, 2005 and Blodgett, Hill and Tax, 1997), the higher the level of complainant or customer satisfaction, the lower the intention to repurchase and the lower the intention to spread negative WOM.

### **Managerial Implications**

The findings have important implications for managers and public officials in the North Cyprus hotel industry. It should be noted that North Cyprus hotels suffer from a number of complaints (Ekiz 2003; Karatepe and Ekiz, 2004). At the micro level, hotel managers should, first, be committed to the delivery of superior service quality and effective complaint management. The lack of top management commitment to effective complaint management leads frontline employees to unsuccessful service recovery efforts. Hotel managers should also make sure that their employees are happy, since job satisfaction leads to customer satisfaction and loyalty (Rust et al., 1996). In addition, hotel managers need to establish proper complaint procedures so that their customers know how and where to complain. Since most of the customers are reluctant to report complaints (Gursoy et al. 2003; TARP 1986), hotel managers should encourage their customers to voice their complaints or problems. Establishing appropriate complaint mechanisms is not enough to manage service recovery process. As discussed by Yavas et al. (2003) and Ekiz (2003), hotel managers should hire suitable frontline employees who have interpersonal skills and who can identify customers who are not happy.

Babakus et al. (2003) suggest that the simultaneous application of training, empowerment, and rewards leads to an increase in frontline employee commitment and service recovery performance. Therefore, hotels need to organize training sessions based on the critical importance of justice and complaint management and the crucial role of frontline employees in the service encounter. Hotels aiming to bring total quality management philosophy to their organizations should provide scientifically based training programs (Arasli, 2002). When frontline employees are empowered, they will be capable of providing their apologies with a tangible token of atonement, which may enhance the justice perceptions of guests. Successful service organizations such as the Ritz-Carlton Hotel Company empower its employees to respond to complaints and / or service failures immediately and to keep the existing customers for a long time (George and Weimerskirch, 1994).

### **Conclusion**

It is widely accepted that service organizations should consider the critical roles of complaint management and effective service recovery efforts and justice perceptions in strict competitive environments. Since their effective efforts



result in increases in complainant satisfaction, loyalty, and profitability levels, service organizations consider these efforts crucial determinants for their survival. With this realization, the current study set out to investigate the effects of organizational responses on justice perceptions of complainant's, as well as possible relationships among these justice perceptions and complainant satisfaction, repurchase intention and negative WOM communication. Findings revealed that apology, redress, explanation, attentiveness, facilitation, effort and promptness had significant positive effects on their related justice dimensions. Also, complainant's justice perceptions; distributive, procedural and interactional justice had significant positive effects on complainant satisfaction. Additionally, complainant satisfaction appeared to be the most influential dimension on repurchase intention and negative WOM communication. Finally, this study has provided useful implications for both hotel managers and public officials in the North Cyprus hotel industry.

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## **Which Wine with Chicken, Pork or Beef? The Impact of Food and Wine Texture Elements on Perceived Match**

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### **Abstract**

This study considers the impact of texture elements on perception of food and wine match. Hypothesized relationships between texture elements and perceived match were presented for mixed and sequential perspectives. Deviation-from-match measures were used for assessments of mixed body-to-body match, sequential body-to-body match, and sequential fattiness-to-tannin match. Findings in this study indicated that sequential assessments of body-to-body match provided a significant predictor of overall match. A substantial improvement was shown in the predictability of overall match when sequential body-to-body and sequential fattiness-to-tannin measures were combined.

Key Words: Wine and food pairing; tannin; body; deviation-from-match.

### **Introduction**

Wine and food have a number of elements that create touch sensations perceived as texture across the surfaces of the mouth. The term texture refers to an inclusive category for a number of terms used to describe these touch (tactile) or mouth-feel sensations. Texture characteristics in food and wine provide a feeling of weight and create a sensation on a softness-roughness continuum to provide support between the food dish and the wine selection. The old adage of ‘white wine with fish and red wine with meat’ is in part based on a texture matching perspective. Most wine and food pairing rules are based on anecdotal evidence built on tradition rather than empirically driven (Nyrgen, Gustafsson & Johansson, 2003).

This study considers the relationships that drive a feeling of texture in food and wine and their impact on perception of match. Specifically, we empirically test the following research questions: Does a body-to-body match impact overall perceived level of match? If so, to what extent? Can a sequential tasting and evaluation of texture elements in wine and food be used to predict level of match? And, how closely related are the sequential and mixed tasting measures of body-to-body match? There seems to be a growing interest in wine and food pairing across the general population. Answers to these research questions are important to increase customer satisfaction through accurate recommendations in food and wine pairings based on these relationships. There seems to be a growing interest in wine and food pairing across the general population. Answers to these research questions are important to increase customer satisfaction through accurate recommendations in food and wine pairings based on these relationships.

### **Textures in Wine**

The overall wine texture creates tactile or mouth-feel characteristics in wine. Evaluators have used a variety of terms and techniques to assess the level of texture in wine; one of these methods being the idea of a ‘mouth-feel’ wheel (Gawel, Oberholster, & Francis, 2000). Research indicates that the original perspective of the mouth-feel wheel is too complex for even experienced wine judges with its multiple characteristics. These characteristics include surface smoothness, drying sensations, dynamic elements, weight, complexity and ripeness (King, Cliff & Hall, 2003). Other authors have defined primary wine texture considerations as tannin level, level of alcohol, presence and level of oak, and an overall feeling of body (Harrington, 2005). Due to a high level of correlation among these elements and to maintain parsimony, this study focuses on the elements of tannin and overall wine body for analysis.

Tannin creates a sensation in wine known as astringency. It is separate from a bitter sensation and is a defining factor in where a wine falls on the smooth (soft) to rough (hard) continuum (Amerine & Singleton, 1977). Generally, a definition of body refers to the consistency or viscosity of wine that is derived from tactile sensations in the mouth. It provides an impression of weight, size and volume (Alexander, 2001). Wine evaluators use terms like having “substance”, “plenty of reserve” or “power” to describe a full-bodied wine (Koplan, Smith, & Weiss., 2002; Peynaud, 1996).

### **Textures in Food**

Texture in food can be an important element in food and wine pairing choices. Primary texture considerations include fat level in the protein or additional plate elements (natural or added), the cooking method employed, and an overall feeling of body across all of the food items included in the particular dish (Harrington, 2005). While fats are many times

used for flavoring as well as mouth-feel, the main objective in this study is to assess fattiness in food for its impact on mouth-feel characteristics such as smoothness, richness, and moistness. Generally, a richer, fatter dish is believed to need a richer, more full-bodied wine to compliment it. A classic match is believed to occur due to a natural affinity of the higher fat in beef or lamb with the higher tannins present in many red wines. Therefore, a strong relationship is likely between high fat foods and tannin levels in wine. While an important texture element is the level of fat present, the cooking method has significant effects on the texture of prepared food items. Poaching or steaming maintains a light body or texture and frying or grilling provides additional texture. These two factors interact to modify the overall body of the protein in its finished form (e.g., Immer, 2002; Koplan, et al., 2002). The theorized combination of cooking method and protein type on overall food power is the basis in our selection of proteins and cooking methods for the 3 food items used in this study. The chicken, pork and beef dishes were created to have increasing effects on texture due to both the protein type and cooking method.

A rating of this texture element is based on the perception of the overall power or body of the prepared dish. This evaluation will include factors such as protein type, fat level, cooking method used, what the item is served with, and basically the gambit of texture factors that provide a feeling of weight or structure throughout the mouth.

### **Hypotheses**

Authors on wine and food pairing are inconsistent in their appraisal of the importance of matching the body style of wine and food. While the empirical research on the body-to-body is relatively scant, predominately anecdotal evidence indicates that this matching relationship is one of the most important in creating a sensation of wine and food match. Therefore, we hypothesize there will be a positive relationship between wine and food body match and overall perceived wine and food match.

Assessing a match between wine and food can be achieved in a variety of ways. One method is to taste the wine and food item simultaneously in the mouth. This mixed tasting method creates interacting sensations that may not be accurately interpreted when tasted separately. A second method is to taste the wine and food sequentially. In this process, each item is tasted and evaluated separately. The perceived levels of body, tannin, fattiness or alcohol are recorded for each item with no mixed tasting of a match during this step of the evaluation. There has been little empirical evidence testing the differences in predicting an overall match of wine and food when using a mixed tasting compared to a sequential tasting (Harrington & Hammond, 2005). For this study, we contend that comparing the deviation-from-match of wine and food elements tasted sequentially can also be used to predict level of overall perceived wine and food match. Therefore, we hypothesize that a sequentially assessed deviation-from-match score on body will have a positive relationship with overall perceived wine and food match.

Wine tannin levels and food fattiness seem to have a strong relationship based on classic wine and food matches. The greater mouth-coating character of cream, natural fat in meats, and some cheeses creates a good environment to mellow the harshness in tannin while the tannin cuts through the fat (e.g., King & Cliff, 2005; Rosengarten & Wesson, 1989). We contend that comparing the deviation-from-match of wine tannin and food fattiness tasted sequentially can also be used to predict level of overall perceived match. Specifically, we hypothesize that a sequentially assessed deviation-from-match score on fattiness-to-tannin will have a positive relationship with overall perceived wine and food match.

Main texture measures used in the food evaluation include fattiness, cooking method used, and an overall assessment of body/texture. Main texture measures used in the evaluation of wine include level of tannin, level of alcohol, level of oak, and an overall assessment of body. A mixed tasting of body-to-body match allows the evaluator to make a holistic assessment of match. A sequential tasting of these elements leaves the evaluation of overall body match as less reliable. A more holistic sequential assessment demands a consideration of multiple elements by visually evaluating "scores" in texture elements. We hypothesize a positive relationship between overall perceived match and the interaction of sequentially assessed deviation-from-match scores for body and fattiness-to-tannin.

### **Materials and Methods**

Eight members of a trained sensory panel evaluated the wines, food and level of match. All panel members had undergone 8 months of weekly training sessions prior to this evaluation. Panel members had been thoroughly trained on the evaluation of wine and food assessing taste components, texture elements and flavor. Members evaluated level of tannin, alcohol, wine body, food fattiness, food body, deviation-from-match scores, and overall perceived level of match.

Four wines were selected that created ascending levels of tannin and body: One white (Riesling) and 3 reds wines (Pinot Noir, Merlot and Cabernet Sauvignon). The food items were selected to create a spectrum of food fattiness and body levels based on differing proteins, cooking methods and ingredients. The food items were prepared by the authors just prior

to the tasting to ensure consistency of each sample and proper serving temperature. The food items included dishes prepared from chicken, pork and beef. Chicken en papillote was prepared with chicken breast baked in parchment packets. Grilled pork loin was cooked on a char-broiler with olive oil and seasoning. Beef stew was braised in a Dutch oven with vegetables, red wine, beef stock, and seasoning.

The tasting process used sequential and mixed approaches (e.g., Nygren, et al., 2003). A sequential approach is defined as an assessment when the wine or food is tasted separately. A mixed approach is defined as an assessment with the wine and food tasted simultaneously. Panel members evaluated wine tannin, alcohol and body separately from other wines and food. Next, food items were evaluated separately for food fattiness and body. The mixed approach combined each food item with each wine and panel members determined the perceived level of food and wine match when tasted together as well as a perceived body deviation-from-match for each wine and food item (e.g., King & Cliff, 2005).

Panel members were instructed to evaluate the wine and food items in 4 steps. 1) Taste and evaluate each wine for tannin level, alcohol level and overall body; 2) taste and evaluate each food item for fattiness and overall body; 3) taste each wine with the food item and score the deviation from body-to-body match; and 4) taste each wine with the food item and score the level of match between each wine and food item. Panel members were given water (room temperature) and unsalted crackers to clear their palates between evaluations.

### Measures

The instrument used to assess key elements is a 3-part format focusing on a sequential tasting of wine and food, first, and a mixed tasting assessment, second. The measurement resulted in 0 to 6.7 cm continuous scales for each food and wine texture characteristic (e.g. Stone & Sidel, 1998). Food texture elements include fattiness and overall body. Wine texture elements include tannin, alcohol level, and overall body. Each wine and food item combination was ranked for level of match by each panel member using a 9-point scale (i.e. 1 = no match, 5 = average match and 9 = synergistic match).

A mixed body deviation-from-match measure was determined using a mixed tasting method. Panel members tasted a wine with each food item and determined if the body was equal, food dominating or wine dominating. The raw values of this assessment ranged from -4 to +4. In the regression test, the absolute value of this measure was used as it indicated a deviation from match whether driven by food or wine body domination. A body deviation-from-match measure was determined using a sequential tasting method. Panel members tasted a food item and assessed the overall level of body on a 0-6.7 cm continuous scale. Each wine was also assessed for overall level of body using the same scale. Panel members were previously trained on food and wine body utilizing scale reference anchors to increase reliability in measurement. The raw value of wine body was then subtracted from food body. In the regression test, the absolute value of this measure was used as it indicated a deviation from match whether driven by food or wine body domination. The food fattiness minus wine tannin measure was determined using a sequential tasting method. Panel members tasted a food item and assessed it for fattiness level on a 0-6.7 cm continuous scale. Each wine was assessed for tannin level using a 0-6.7 cm continuous scale. The raw value of wine tannin was then subtracted from food fattiness. In the regression test, the absolute value of this measure was used as it indicated a deviation from match whether driven by food fattiness or wine tannin domination. The body/body and fattiness/tannin interaction was calculated multiplying the previously determined absolute value of sequential body deviation-from-match times sequential food fattiness minus wine tannin. This interaction represents the impact of the relative match of body and fattiness/tannin elements considered together. Both of these interacting measures were determined using a sequential tasting process.

### Statistical Analysis

Means and standard deviations were averaged across all wine and food combinations to give an indication of panel member variability. Wine body is highly correlated with tannin level (.91,  $p < .01$ ) and alcohol level (.50,  $p < .01$ ). Food body is highly correlated with food fattiness (.71,  $p < .01$ ). Body match is highly correlated to food and wine match (.29,  $p < .01$ ). Body match is also highly correlated with food body minus wine body (.80,  $p < .01$ ) and food fattiness minus wine tannin (.74,  $p < .01$ ). Food and wine match is highly correlated with food body minus wine body (.31,  $p < .01$ ). And, food body minus wine body is highly correlated with food fattiness minus wine tannin (.81,  $p < .01$ ).

To assess the impact of hypothesized wine and food texture elements on tasters' perception of level of match, a separate linear regression test (SPSS v12) was run to determine the direct effects of the mixed body deviation-from-match, sequential body deviation-from-match, sequential food fattiness minus wine tannin, and the body/body and fattiness/tannin interaction. Because of possible problems of multicollinearity, these independent variables were assessed using separate regression tests. The dependent variable for all tests was the level of food and wine match across all wines and food items.

## Results

To provide a consistent evaluation of the relative impact of each independent variable on level of food and wine match, all beta weights are standardized. As all independent variables are the absolute value of deviations from a match, a negative value in the beta weight indicates a positive impact on perceived level of food and wine match.

Test 1 used the absolute value of the body deviation-from-match determined during a mixed tasting of the wines and food items as the independent variable. The regression model had an  $R = .57$  and an  $R^2 = .33$ . The overall regression model had an  $F = 46.24$  and was highly significant with  $p < .001$ . The body match level had a highly significant relationship with level of food and wine match ( $\beta = -.57, p < .001$ ) indicating the strong impact of food and wine body match (neither dominating) on perceived overall pairing match. In test 2, the independent variable was the absolute value of the body deviation-from-match determined during a sequential or separate assessment of the wines and food items. The regression model had an  $R = .29$  and an  $R^2 = .09$ . The overall regression model had an  $F = 8.85$  and was highly significant with  $p < .01$ . The body match level in this separate tasting process had a highly significant relationship with level of food and wine match ( $\beta = -.29, p < .01$ ). While the variance accounted for in this test was substantially less than test 1 using the mixed tasting body match, the results provide evidence of the strong impact of this food and wine body match (neither dominating) on perceived overall pairing match. The independent variable in the third regression test (Test 3) was the absolute value of the deviation from food fattiness and wine tannin match determined during a sequential assessment of the wines and food items. The regression model had an  $R = .23$  and an  $R^2 = .06$ . The overall regression model had an  $F = 5.42$  and was significant with  $p < .05$ . The fattiness to tannin match level in this separate tasting process had a significant relationship with level of food and wine match ( $\beta = -.23, p < .05$ ). The variance accounted for in this test was substantially less than test 1 and less than test 2. The results from this test provide evidence of the strong impact on level of food and wine match when a fattiness and tannin match is present but this relationship by itself is not as dominant as overall body match.

The independent variable in the final test (Test 4) combined food body to wine body and food fattiness to wine tannin matches determined during the sequential tasting process. The absolute values of these 2 variables were multiplied together to determine if considering both of these elements together creates a more significant relationship with the ultimate perceived match than the 2 variables separately. The regression model had an  $R = .35$  and an  $R^2 = .12$ . The overall regression model had an  $F = 12.78$  and was significant with  $p < .001$ . This interaction had a significant relationship with level of food and wine match ( $\beta = -.35, p < .001$ ). The variance accounted for in this test was substantially more than tests 2 and 3 but still less than test 1. The results from this test provide strong evidence for considering both food body to wine body and fattiness to tannin matches to predict level of food and wine match when tasted sequentially.

## Discussion and Conclusion

The old adage 'white wine with fish and red wine with meat' denotes the theorized importance of body matching in the food and wine pairing equation. While this notion is based on a long history of anecdotal evidence, very little empirical testing has been published testing the relative impact of the body-to-body match on perception of food and wine match (Nygren, et al., 2003). This study supported the hypothesis that a body-to-body match is a significant predictor of overall perceived match. A main contribution of this study is the finding that perceived level of match can be predicted using sequential evaluations of food items and wines. The body deviation-from-match in this sequential process was a significant predictor of overall perceived match.

Food and wine body is one of several related elements that impact a sense of texture. Tannin, alcohol, oak aging and extract are additional elements impacting texture sensations in wine. Prominent elements impacting food texture include food fattiness, protein type and cooking method. This study assessed the hypothesized relationship of deviation from fattiness to tannin match. These two elements are highly related to a sensation of body in wine and food. The deviation from fattiness-to-tannin match measure provided additional prediction ability although substantially less than the deviation from body-to-body match. When the deviation from fattiness-to-tannin match measure and deviation from body-to-body match are combined, this interaction provided a strong relationship with the overall perception of match using a sequential measurement process.

The findings from this study have important implications for foodservice management in the area of wine and food pairing. The ability to predict overall perceived match using sequentially assessed elements of wine and food provides interesting possibilities for training and systems that create reliable assessments of food and wine match. For instance, staff tasters in restaurant operations could create a measure of body and tannin for each wine on the wine list. And, they could create a measure of body and fattiness level for each food item on the menu. This process would provide all members of the front-of-the-house team to make better match recommendations to customers. And, it would provide back-of-the-house members with information to create and adapt menu items to better match specific wine selections.

Ultimately, this ability creates an opportunity to increase gastronomic satisfaction across a wide range of restaurant types. The usefulness of increased gastronomic satisfaction has been pointed out in the literature as a great way to increase customer satisfaction (Stanich, 2004), increase average checks and overall profits (Harrington, 2005). The methods used in this study could be adopted in restaurant situations with multiple wines and menu items to create element evaluations that predict level of match among all combinations. This tool would be useful for service staff to communicate wine and food recommendations that meet a wide array of customer preferences and expectations.

### Study limitations and future research

While the members of the tasting panel in this study received substantial training prior to this study, a problem with developing a valid methodology of wine and food pairing is the potential impact of individual preferences and differences on match perceptions. Individual preferences may create a substantial level of variance or bias in responses. Individuals that prefer red or white wine, for example, will perceive a higher level of match regardless of other factors involved.

The testing method used in this study did not provide complete control over temperature, color, and other factors that could bias or distract tasters from providing more accurate evaluations. Because our objective was to create greater generalizability of these findings to foodservice industry settings, the experimental design was intentionally developed to more closely resemble a field study rather than a strictly controlled lab study (Mook, 1983).

Future research is needed to define and refine the nature or importance of many hypothesized relationships between food and wine. While texture elements were shown as an important part of the perceived match puzzle, additional testing assessing the relative impact of taste elements (acidity, sweetness, dryness and bitterness) and flavor elements are essential to creating a holistic perspective on wine and food pairing (e.g., Harrington, 2005).

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## Self-Monitoring and Currency Usage in the Foodservice Industry

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### Abstract

The current study examined the effect of self-monitoring on consumers' preferences of currency usage in restaurant industry, and studied the context affect of restaurant segments in consumers' currency preferences. An experimental design was applied to test the conceptual model developed for this study. Results from multinomial logistic regression indicated that the effects of self-monitoring and dining companions were significantly related to consumers' currency preferences. The study identified the characteristics of consumers using the different currency options in foodservice industry. By understanding the individual personality differences when using different currencies, restaurants could more effectively match currency choices with consumers' personality types in different restaurant segments.

Key Words: Currency usage; Restaurants; Consumer Behavior; Frequent Guest Points

### Introduction

The immense popularity of marketing promotions and loyalty programs has resulted in the introduction of several new exchange media other than money (Drèze and Nunes, 2004). From frequent-flyer mileages to credit cards (e.g., American Express Membership Rewards), consumers accumulate assets in various novel currencies, which they then budget, save, and spend such as they do with money. Currently, some 100 million people around the world belong to at least one such scheme (including one in three adults in the United States), collecting the nearly 500 billion miles distributed annually (*The Economist*, 2002). Despite the growing popularity of prices being presented in more than one currency (such as frequent product purchase points, frequent guest program points, loyal customer points) limited research has examined how consumers evaluate currency choices other than money. This study is designed to describe how self-monitoring may aid in understanding how individual differences can influence consumers' preferences for currency usage in the restaurant industry. Another purpose of the study is to determine whether consumers' currency preferences vary across restaurant segments (fine dining, casual and quick service).

### Research Background

#### *The Usage of Currency*

The pricing literature is replete with research that focuses on how consumers respond to sales promotions when both the reference level and the change are expressed in dollar terms (Nunes and Park, 2003). Yet many everyday exchanges involve a variety of resources other than money (Nunes and Park, 2003; Drèze and Nunes, 2004). Nunes and Park (2003) examine how consumers evaluate outcomes that involve different currencies. The results of their study demonstrated that two different resources (i.e., dollars and miles), which independently were perceived as equivalent, have different effects when included as an incremental cost to the currency of the primary expense. In extending the Nunes and Park work, Drèze and Nunes (2004) examined consumers' responses for the combined-currency price (dollars and miles). Consumers prefer to pay primarily in dollars at the low end, and preference to pay primarily in frequent flier miles (points) is at the high end. In the middle range, combined-currency prices (dollars and points) are most widely favored. Thus, it is important to understand varying consumer preferences for alternate currencies (dollars and points) in restaurant contexts. According to the National Restaurant Association (2004), restaurants can be categorized, based on guest check average, as: (1) high-end, fine-dining restaurants with menu prices of \$25 or higher; (2) mid-price, casual-dining restaurants with menu prices ranging from \$6 to \$24; (3) quick-service restaurants (QSRs) with menu prices of \$5 or under. Thus, the consumer preference for currency usage may be affected by different restaurant segments based on guest check average.

*H1: While dining out, consumers are more likely to pay with (a) single currency – points-only – at high-end restaurants, (b) combined-currency – dollars and points – at mid-priced restaurants, and (c) single currency – dollars-only – at low price restaurants.*

### *Self-Monitoring*

Since Snyder (1974) developed the construct of self-monitoring, it has been one of the most frequently employed individual-difference measures in the field of personality and social psychology. The self-monitoring construct seems particularly useful, because this trait reflects the degree to which individuals are influenced by internal versus external cues. According to Snyder (1979), people differ in the extent to which their behavior is susceptible to situational or interpersonal cues, as opposed to inner states or dispositions. Individuals can be classified into two groups with regard to their level of self-monitoring. Low self-monitoring individuals are especially sensitive and responsive to inner feelings, attitudes, and beliefs. They view their behavior to be influenced primarily by internal cues, such as personal beliefs and values (Snyder, 1979; Ajzen et. al., 1982). In contrast, high self-monitors are much less sensitive to internal beliefs and values. Instead, they view their behavior as stemming primarily from a pragmatic view of what external, situational cues that are perceived as socially appropriate. Hence, high self-monitors may prefer to use single currency compared to low self-monitors.

*H2: While dining out, high self-monitoring consumers are more likely to pay with a single currency than low self-monitoring consumers.*

### *Impression Management*

There are numerous ways in which to define impression management, yet at the center of these is the recognition that people's comprehension of a phenomenon can be directed by others and their attempts to frame one's perception (Fisk and Grove, 1996). Impression management refers to the process by which individuals attempt to control others' impressions of them. Because impressions people make of others have implications for how others perceive, evaluate, and treat them, as well as for their own views of themselves, people sometimes behave in ways that will create certain impressions in others' eyes (Leary and Kowalski, 1990). People are fairly sensitive to the social significance of their conduct and behaviors and are motivated to create desirable social identities in their interpersonal encounters (Tetlock and Mansted, 1985). Bearden & Etzel (1982) reported that the conspicuousness of a product is positively related to its susceptibility to reference-group evaluation. Furthermore, an individual's self-esteem can be enhanced through ownership and consumption of products typically associated with an admired person or group referred as the aspiration group. In a restaurant context, Stayman and Deshpande (1989) found that consumers' menu choices were affected by their dining companions, with menu items consistent with the diner's ethnic background more likely to be selected when dining with parents than with business associates. Thus,

*H3: While dining out, currency preferences are affected by the dining context, such that payment is more likely to occur with (a) dollars-only when dining with a higher-status companion and (b) points-only when dining with an equal-status companion or when dining alone.*

### *Self-Monitoring and Impression Management:*

There are individual differences in the extent to which people are willing to adapt their behavior to fit situational demands (e.g., Snyder 1987; Bearden, Netemeyer, and Teel 1989). Snyder's (1979) review of the literature reveals support for many predicted differences between low and high scorers on the self-monitoring scale. Self-monitoring may yield different effects for different types of dining companions (e.g., friends and family versus someone the diner wants to impress like a social date or the boss). Since the effects mediated by impression-management processes should occur much more strongly among high self-monitors, they may be concerned that a higher-status dining companion (e.g., boss) would perceive use of points (either solely or in combination with dollars) as "cheap." In contrast, there would be no basis for such an effect to emerge if the diner were a low self-monitor or is s/he was dining alone. According to Snyder (1979), high self-monitors view their behaviors as stemming primarily from a pragmatic view of what external and situational cues define as socially appropriate action and use these cues as guidelines for monitoring their own verbal and nonverbal self presentation.

*H4: While dining out, currency preferences across dining contexts are moderated by self-monitoring, such that high self-monitors are more likely than low self-monitors to pay with dollars-only when dining with a high-status companion.*

*H5: While dining out, currency preferences of high- and low-self-monitoring consumers are affected by the type of restaurant (high, mid and low priced).*

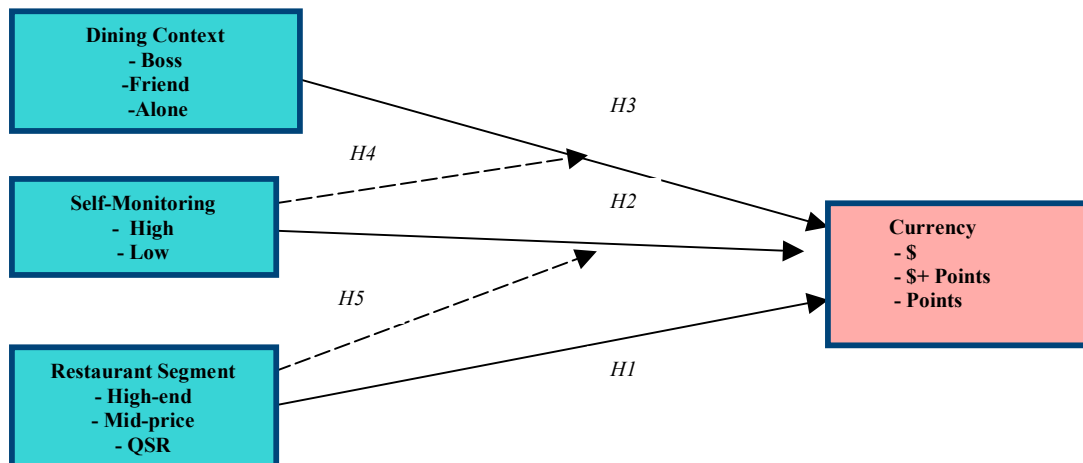
### **Methodology**

To control for factors like age, education, and income, a student sample was used. Participants were 471 undergraduate students at a major Midwest university in the USA. In order to examine the effect of self-monitoring, dining companions, and restaurant segments on consumers' preference for the currency usage, a 2 self-Monitoring (high/low) x 3



dining companions (boss/friend/alone) x 3 restaurant segments (fine-dining/causal-dining/quick-service restaurants) between-subject design was chosen. Self-monitoring was measured using Snyder and Gangestad's (1986) 18-item Self-Monitoring Scale (SMS). All respondents were expected to complete Snyder and Grangestad's (1986) Self-Monitoring Scale. Usage of scenario method of investigation is well established in the marketing literature. The data collected from the participants were analyzed using the Statistical Package for Social Sciences 13<sup>th</sup> version (SPSS) and STATA 8<sup>th</sup> version.

### A Conceptual Model



### Results and Discussions

The respondent pool ( $n = 471$ ) was recruited from different undergraduate classes and snowball sample at a major Midwest university. In the sample, 43% of the respondents were female, and about 57% were male. The majority of the respondents (82.1%) were 18-23 years old. More than two-thirds of the respondents (72.4%) were employed, part-time or full-time. The mean of total monthly spending was about \$670 and the mean of monthly spending on food was about \$186. Monthly spending is used as a proxy for monthly income.

#### Self-Monitoring

For self-monitoring, 31.3% of the high self-monitors and 24.1% of the low self-monitors prefer to pay with dollars-only. The preference for usage of dollars-only was higher for high self-monitors than for low self-monitors. On the other hand, the preference for usage of points-only was higher for low self-monitors than for high self-monitors. In the current sample, 54.8% of the low self-monitors and 49.4% of the high self-monitors prefer to pay with points-only. Moreover, 21.2% of the low self-monitors and 19.3% of the high self-monitors preferred the combination of dollars and points. The effect of self-monitoring was not significant when comparing the preference for the combined-currency (dollars and points) to the preference for dollars-only. Hypothesis 2 was not supported. However, self-monitoring was significant at 0.1 level ( $p = .07$ ) and had a positive effect on the probability of preferring paying points-only as opposed to paying dollars-only. The estimated odds for high self-monitors was 2.448. This suggests that low self-monitors were 2.448 times more likely to prefer to pay with points-only (as opposed to dollars-only) than high self-monitors. In other words, high self-monitors were less likely to prefer to pay with points-only (as opposed to pay with dollars-only) than low self-monitors.

#### Restaurant Segments

According to Figure 1, the patterns of currency preferences were similar across the three restaurant segments (fine-dining, casual-dining, and quick-service restaurant). More than half of the respondents preferred points-only across three restaurant segments, and the respondents least preferred the combined-currency: dollars and points. In fine-dining restaurants, 51.8% of the respondents preferred points-only, 27.4% of the respondents preferred dollars-only, and 20.7% preferred the combination of dollars and points. Similarly, in casual-dining restaurants, 50.3% of the respondents preferred points-only, 29.1% of the respondents preferred dollars-only, and 20.5% preferred the combination of dollars and points. In quick-service restaurants, the respondents' preferences for points-only were slightly higher than fine-dining and casual-dining restaurants, with 53.8% of the respondents preferring points-only, 26.9% of the respondents preferring dollars-only, and 19.2% preferring a combination of dollars and points. While testing for the restaurant segment effect, fine-dining restaurant segment was treated as the reference category. The effect of restaurant segments was not significant when comparing the preference for the combined-currency (dollars and points) to the preference for dollars-only; and when comparing the preference for points-only to the preference for dollars-only. Therefore, hypotheses 1 were not supported. However, the logistic coefficient for casual-dining restaurant was negative and significant at 0.1 level ( $p = .07$ ) when

comparing the preference for the combined currency (dollars and points) to the preference for dollars-only (Table 1). The estimated odds for casual-dining restaurant were .328. This suggests that respondents dining at fine-dining restaurant were .328 times less likely to prefer to pay with the combined currency (dollars and points), as opposed to dollars-only, than those dining at casual-dining restaurant.

Table 1  
Results of Multinomial Logistic Regression

\*, \*\*, and \*\*\*Significance levels at the .1, .05, and .01

#### *Dining Companions*

For companions, 46.1% of the respondents who dine with the boss while 19.5% of the respondents who dine with a friend and 16.1% of the respondents who dine alone preferred dollars-only. The preferences for paying dollars-only while

		Dollars + Points vs. Dollars-only			
Variables (n=471)		$\beta$	S.E.	Sig.	Exp ( $\beta$ )
<b>Restaurant Seg.</b> (omitted Fine-Dining)	<i>Casual-Dining</i>	-1.115	.628	.076	.328
	<i>QSR</i>	-.407	.605	.501	.665
<b>Self-Monitoring</b> (omitted Low SEM)	<i>High SEM</i>	.194	.607	.749	1.215
	<b>Companions</b> (omitted Boss)	-.668	.514	.194	.513
	<i>Alone</i>	-.301	.509	.554	.740
	<b>Interactions :</b> <i>SEM*Casual-Dining</i>	1.289	.712	.070	3.629
	<i>SEM*QSR</i>	.804	.710	.258	2.234
	<i>SEM* Friend</i>	-.642	.702	.360	.526
	<i>SEM*Alone</i>	-1.616	.742	.029	.199
<i>Constant</i>		1.295	1.952	.507	
		Points-only vs. Dollars-only			
Variables (n=471)		$\beta$	S.E.	Sig.	Exp ( $\beta$ )
<b>Restaurant Seg.</b> (omitted Fine-Dining)	<i>Casual-Dining</i>	-.466	.517	.367	.627
	<i>QSR</i>	.099	.490	.839	1.105
<b>Self-Monitoring</b> (omitted Low SEM)	<i>High SEM</i>	.895	.502	.074	2.448
	<b>Companions</b> (omitted Boss)	-.756	.433	.081	.469
	<i>Alone</i>	-.915	.406	.024	.400
	<b>Interactions:</b> <i>SEM*Casual-Dining</i>	.309	.592	.601	1.363
	<i>SEM*QSR</i>	-.158	.585	.788	.854
	<i>SEM* Friend</i>	-.926	.580	.111	.396
	<i>SEM*Alone</i>	-1.527	.610	.012	.217
<i>Constant</i>		2.719	1.436	.058	

dining with the boss were higher than while dining with a friend or alone. Also, the preferences for usage of the combination of dollars and points while dining with a friend (23.5%) were higher than while dining with the boss (18.0%) or while dining alone (19.4%). On the other hand, the preferences for paying with points-only while dining alone (64.5%) were much higher than while dining with the boss (35.9%), and slightly higher than while dining with a friend (57.0%). While testing for the companion effect, dining with the boss was treated as the reference category. The logistic coefficient for who dine with a friend was negative and significant at the 0.1 significance level ( $p = .08$ ) when comparing the preference for points-only to the preference for dollars-only. The estimated odds for dining with a friend were 0.469. This suggests that for who those dine with the boss were 0.469 times less likely to prefer to pay with points-only (as opposed to dollars-only) than the respondents who dine with a friend. Also, the logistic coefficient for who dine alone was negative and significant at the 0.05 significance level ( $p = .02$ ) when comparing the preference for points-only to the preference for dollars-only. The estimated odds for dining alone was 0.40, indicating that respondents that dine with the boss were 0.40 times less likely to prefer to pay with points-only (as opposed to dollars-only) than the respondents who dine alone. Thus, the results support hypothesis 3.

#### *Interaction of Self-Monitoring and Dining Companions*

The interaction effect of self-monitoring and dining companions was significantly associated with currency preference. The logistic coefficient for high self-monitors dining alone was negative and significant at the 0.05 significance level ( $p = .02$ ) when comparing the preference for the combined-currency (dollars and points) to the preference for dollars-only. The estimated odds ratio for dining alone was .199. In addition, the logistic coefficient for high self-monitors dining alone was negative and significant at the 0.05 significance level ( $p = .01$ ) when comparing the preference for points-only to

the preference for dollars-only. The estimated odds ratio was .217. These suggest that high self-monitors dining alone were more likely to prefer to pay with combined-currency (dollars and points) or points-only than low self-monitors. Thus, hypothesis 4 was supported.

#### *Interaction of Self-Monitoring and Restaurant Segments:*

The interaction effect of self-monitoring and restaurant segment was significantly associated with currency preference. The logistic coefficient for high self-monitors dining at fine-dining restaurant and quick-service restaurant were not significant when comparing the preference for the combined-currency (dollars and points) to the preference for dollars-only and when comparing the preference for points-only to the preference for dollars-only. However, the logistic coefficient for interaction of self-monitoring and casual-dining restaurant was positive and significant at 0.1 level ( $p=.07$ ) when comparing the preference for the combined currency (dollars and points) to the preference for dollars-only. The estimated odds ratio was 3.629. This suggests that low self-monitors dining in casual-dining restaurant were more likely to prefer to pay with combined-currency (dollars and points) than high self-monitors. Therefore, Hypothesis 5 was partially supported. In summary, three of the five posited research hypotheses were statistically supported.

#### **Conclusions and Management Implications**

This study extends our understanding of individual differences associated with currency preference by examining the effects of self-monitoring, dining companions, and restaurant segment on preferences for currency usages. Identifying the characteristics of consumers using the different currency options is critical for the foodservice industry. Foodservice managers have to know their customers and remain close to the consumers (Kotler, Bowen and Makens 2005). By understanding the individual personality differences of customers when using different currencies, restaurants could decide whether or not to implement different currency prices based on their target markets. Restaurants could apply different currency prices based on the target customers and the concepts of the restaurants. The results of this study suggest that consumers do not prefer paying their dining experiences with points to avoid making a cheap impression on the higher-status dining companion (e.g., boss). By implementing such a rewards program, the restaurants may keep more customers patronizing their chains, increase customers' loyalty, and further enhance restaurants' the long-term profitability.

#### **Limitation and Future Research**

Little prior research exists on exploring characteristics of consumers dealing with the different currency options. This study takes the first step towards understanding characteristics of consumers that influences their currency preferences. However, the major limitations of this study include that the findings from a student sample may not be the best choice to generalize to other populations. While students frequently consume in low and mid-price restaurants and are potential consumers for high-end restaurants, they are not representative of the larger population. Since students tend to be in low income bracket and are more value oriented than non-students, financial reward of paying with points without costing any money seems most attractive for them. Also, the sample homogeneity might also have contributed to the lack of some of the demographic effects.

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## **The Degree of Internationalization's Effects on the Market Capitalization of Publicly Traded U.S. Restaurant Firms**

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### **Abstract**

This paper examines the value relevance issue of the degree of internationalization in publicly traded restaurant firms in the United States. It makes three principal points. First, echoing Upneja and Hua (2005), this study also finds book value of equity and earnings explain a significant portion of the market capitalization. Second, the degree of internationalization is positively and significantly related to the market capitalization. Third, when earnings are decomposed into domestic and foreign components, new information is revealed to the market and priced accordingly as demonstrated by the incremental adjusted R<sup>2</sup> value. It appears that investors consider the foreign component of earnings as of much more importance than the domestic component during the valuation process by pricing the foreign earnings component significantly more.

**Key Words:** internationalization, valuation, market capitalization, foreign earnings.

### **Introduction**

According to National Restaurant Association (NRA) (2005), restaurant-industry sales are forecast to advance 4.9% in 2005 and equal 4% of the U.S. gross domestic product, reaching \$475.8 billion. Many firms have grown so fast over the past 25 years that they have been facing an intensely competitive and highly saturated markets in the United States (Crafts and Ukpaka, 1996; Technomic, 1998a). As an important strategic decision, internationalization became one of the most common responses, especially when facilitated by advances in technology such as internet and global distribution systems (Emmer, R. M., 2003; O'Connor P. & Piccoli G., 2003). In 1997, the number of international units and sales of the top 100 U.S. restaurant chains grew by 12.7% and 7.2% respectively, compared to 2.8% and 4.8% for their domestic counterparts (Technomic, 1998a). However, expanding overseas is ensued by risks. Singh, Upneja and Dalbor (2003) identified unfavorable macro-economic conditions, fluctuations in relative values of currencies, political instability, cultural and religious differences and different tax and accounting structure, among other factors. Therefore, considering the potential risks ensued during the internationalization process, do investors view the decision of heading into the international arena as value creating? If the answer is yes, the degree of internationalization is expected to be positively related to the market capitalization of restaurant firms. Moreover, which component of earnings, the foreign or the domestic, do investors consider as more important when valuing an international restaurant firm?

### **Literature review**

It is well grounded to conduct research on firm valuation using financial statements (e.g. Beaver, Kettler and Scholes (1970), Ball and Brown (1969) and Ou and Penman (1989)). Some of these studies address the value relevance issue by essentially considering book value of equity and earnings as a summary of the events that are reflected in the market capitalization (e.g. Easton and Sommers (2003) and Upneja and Hua (2005)). In the arena of strategic management, the growth and profitability of international firms have been extensively documented. Generally speaking, there is a positive relationship between product diversification and profit stability, between international market diversification and profitability and between international market diversification and profit stability; thus, the notion that overseas expansions lead to higher profitability was supported (e.g., Tobin, 1950; Severn and Laurence, 1974; Caves, 1982; Kim, Hwang and Burgers, 1989; Habib and Victor, 1991; Mitchell, Shaver and Yeung, 1992).

Due to the increase in competition and market saturation, some firms were driven overseas to seek new locations and growth opportunities (Parsa and Khan, 1992; Crafts and Ukpaka, 1996); while some started to explore non-traditional locations such as schools, hospitals, and office buildings, causing diffusion of segments (Parsa and Khan, 1993). It appears that heading abroad presents the most new opportunities for achieving higher growth (Singh, Upneja and Dalbor, 2003). However, the top 101 public restaurant chains experienced a decline in growth of 7.1%, 11.4%, and 26.2% in median operating margins, profit margins, and return on assets respectively in 1997 (Technomic, 1998b), indicating that overseas expansions do not necessarily guarantee immediate profitability and success for restaurant firms.

## Methodology

### Sample

Data are collected from Compustat Industrial Annual. All publicly traded restaurant firms are identified and corresponding data set (SIC code 5812) collected from 1985 to 2004. To avoid oversampling on domestic restaurant firms as well as to ensure comparability, matching sample firms are selected based on total assets. First, all publicly traded restaurant firms with foreign pretax income and domestic pretax income (international firms) are identified and the range of total assets obtained. Then, based on the range obtained, domestic firms (those without foreign pretax income) with the same total assets range are identified. The final sample consists of the firms that reported foreign pre-tax income (henceforth “international”) and similarly-sized purely domestic firms. Further, to mitigate outlier’s effect, McDonald’s Corp is excluded. The procedure employed ensures two desirable properties for follow up OLS analyses: normality and homogeneity.

### Variables of interests

The main interest of the paper lies in the degree of internationalization’s effects on the market value of equity. The construct of “internationalization” is operationalized in the following two steps. A variable NI is calculated as the sum of domestic pretax income and foreign pretax income. Then the degree of internationalization (MNC) is defined as foreign pretax income divided by NI. By so doing, the degree of internationalization is reasonably well represented considering earnings as the major performance indicator. Other independent variables include net book value (NBV), calculated as the difference between total assets and total liabilities, NI, Domestic pretax income and Foreign pretax income. The dependent variable is operationalized by market capitalization (MC). It is computed as the product of common shares outstanding and stock prices.

### Hypotheses and models

International firms may possess competitive and monopolistic advantages in foreign markets, which enable them to outperform domestic companies (Kim and Lyn, 1986). However, international firms could incur certain extra risk concerns when they initiate the internationalization process and they could be perceived to be more vulnerable to relevant foreign economic fluctuations. Thus to establish a model to test the degree of internationalization, the following model is tested first following Upneja and Hua (2005).

$$MC_{i,t} = \beta_0 + \beta_1 NBV_{i,t} + \beta_2 NI_{i,t} + \varepsilon_{i,t} \quad (1)$$

$MC_{i,t}$  = The market capitalization for firm  $i$  at the end of the fiscal year  $t$ , computed as the product of common shares outstanding and stock prices.

$NBV_{i,t}$  = The net book value of equity for firm  $i$  at the end of fiscal year  $t$ , calculated as the difference between total assets and total liabilities.

$NI_{i,t}$  = The sum of domestic pretax income and foreign pretax income for the firm  $i$  in the fiscal year  $t$ .

It is possible that the degree of internationalization is value relevant in the presence of control variables, NBV and NI, considering internationalization could bring in more earnings while lowering costs; thus adding value to the firm. However, it is equally possible that greater uncertainty could ensue and thus increase the perceived riskiness of the subject firm, which may negatively affect the firm’s market capitalization. Therefore, we set out to empirically answer this question. We test the following model and expect a positive relationship between MNC and MC, based on the argument that oversea expansions leads to higher profitability (e.g., Tobin, 1950; Severn and Laurence, 1974; Caves, 1982; Kim, Hwang and Burgers, 1989; Habib and Victor, 1991; Mitchell, Shaver and Yeung, 1992).

$$MC_{i,t} = \beta_0 + \beta_1 NBV_{i,t} + \beta_2 NI_{i,t} + \beta_3 MNC_{i,t} + \varepsilon_{i,t} \quad (2)$$

$MNC_{i,t}$  = Foreign pretax income divided by NI for firm  $i$  at the end of the fiscal year  $t$ .

Foreign pretax income, which is a component of NI, has certain interesting value relevance features worth exploring. For example, is it true that the foreign pretax income adds value to the market capitalization considering its relative small contribution to the NI and possible extra risk concerns raised by uncertainties of operating in a foreign country? In the presence of domestic earnings, do foreign earnings have incremental power explaining variability in the market capitalization? These questions are answered by testing the following model.

$$MC_{i,t} = \beta_0 + \beta_1 NBV_{i,t} + \beta_2 Domestic_{i,t} + \beta_3 Foreign_{i,t} + \varepsilon_{i,t} \quad (3)$$

$Domestic_{i,t}$  = Domestic pretax income for firm  $i$  at the end of the fiscal year  $t$ .

$Foreign_{i,t}$  = Foreign pretax income for firm  $i$  at the end of the fiscal year  $t$ .

It is possible that investors place more weight on the foreign earnings component for valuation because of the implication of higher growth rate from overseas expansion. To understand which component of earnings, the domestic or the foreign, is considered as more important by investors, model (3) is modified to test whether  $\beta_3$  is significantly greater than  $\beta_2$ , taking into account of the variance associated with the difference between  $\beta_3$  and  $\beta_2$  (Wooldridge, 2000). Define  $\theta = \beta_3 - \beta_2$ . If  $\beta_3$  is significantly greater than  $\beta_2$ ,  $\theta$  will be significantly greater than 0. Rewrite model (3) as following.

$$MC_{i,t} = \beta_0 + \beta_1 NBV_{i,t} + \beta_2 (\text{Domestic}_{i,t} + \text{Foreign}_{i,t}) + \theta \text{Foreign}_{i,t} + \varepsilon_{i,t} \quad (4)$$

## Findings

The results in Table 1 summarize the basic statistics of all the variables of interest. The average value of MNC, the metric for the degree of internationalization, is 23% with a standard deviation of 43%, indicating adequate variability in the internationalization process for the firms in the sample. Notice the maximum value of MNC, 176%, it can be seen that some of the international firms have almost twice of their NI contributed from foreign pretax income, indicating a very high degree of internationalization and dependence on the foreign economy. Yet generally speaking, the overall picture for NI implies that domestic earnings contribute more than the foreign counterpart.

Table 1  
Summary Statistics (in millions of dollars)

Variable	Firm Type	N	Mean	S.D.	Median	Minimum	Maximum
MC	Int	78	1759.00	2597.00	371.57	3.67	13682.00
	Dom	70	216.00	246.84	31.42	1.76	864.25
NBV	Int	78	368.00	593.95	176.60	-1620.00	1759.00
	Dom	70	98.49	115.46	19.00	-6.47	395.61
NI	Int	78	153.39	269.00	32.09	-232.74	1038.00
	Dom	70	21.38	26.76	2.58	-8.26	78.97
MNC	Int	78	0.23	0.43	0.15	-1.36	1.76
Domestic	Int	78	119.79	209.51	14.26	-178.18	782.00
Foreign	Int	78	33.60	72.34	4.20	-74.81	322.00

### Note:

Int = International firms, defined as those having both domestic earnings and foreign earnings; Dom = Domestic Firms, defined as those having only domestic earnings.

MC = Common Shares outstanding (data24) \* Stock prices (data25)

NBV = Total Assets (data6) - Total Liability (data181)

NI = Domestic pretax income (data272) + Foreign pretax income (data273)

MNC = Foreign pretax income / NI

Domestic = Domestic pretax income

Foreign = Foreign pretax income

The results of estimating equation (1) are reported in Table 2. Both NBV and NI are positively significant at 1% level and together they explain about 85.03% variation in MC, echoing findings of previous studies (e.g. Easton and Sommers (2003) and Upneja and Hua (2005)).

Table 2  
Value relevance test of NBV and NI

Variable	Parameter estimates	Standard Error	t-Value	Pr> t	Variance Inflation Factor	Adj. R <sup>2</sup>
Intercept	129.0875	75.1898	1.72	0.0881	0.0000	0.8503
NBV	0.4654	0.1547	3.01	0.0031	1.1825	
NI	8.6670	0.3429	25.28	<.0001	1.1825	

The degree of internationalization's effect on the market capitalization is tested in model (2) and results reported in Table 3. In the presence of NBV and NI, the degree of internationalization (MNC) is significantly greater than 0 at all reasonable significance levels, implying a positive impact of internationalization on market capitalization. In other words,

weighing between risk factors and potential benefits, investors view international expansions as value adding activities and the extent of internationalization as a positive indication of firm performances. The adjusted  $R^2$  reported in Table 4 has a value of 85.83%, showing an incremental of 0.8% over the value relevance model (1) with only NBV and NI. It implies MNC has incremental explanatory power in the variability of market capitalization in the presence of NBV and NI. The findings have important strategic decision making implications. Generally speaking, it is supported that the marginal benefits brought by internationalization outweigh the marginal costs.

Table 3  
Value relevance test of MNC

Variable	Parameter estimates	Standard Error	t-Value	Pr> t	Variance Inflation Factor	Adj. $R^2$
Intercept	64.8486	76.1518	0.85	0.3959	0.0000	0.8583
NBV	0.4780	0.1506	3.17	0.0018	1.1834	
NI	8.5653	0.3352	25.55	<.0001	1.1944	
MNC	578.8375	190.7936	3.03	0.0029	1.0103	

Table 4 reports the results of testing model (3). In the presence of net book value (NBV) and domestic pretax income (Domestic), foreign pretax income (Foreign) shows significant incremental explanatory power of the variability in the market capitalization. Moreover, Foreign is positively significantly related to MC despite potential risk concerns and its relatively smaller contribution. The adjusted  $R^2$  is 85.45%, slightly higher than that of model (1) while lower than that of model (2), indicating more information is revealed by decomposing NI into Domestic and Foreign. Moreover, this new information is priced by investors accordingly.

Table 4  
Value relevance test of foreign earnings

Variable	Parameter estimates	Standard Error	t-Value	Pr> t	Variance Inflation Factor	Adj. $R^2$
Intercept	150.0199	74.6795	2.01	0.0464	0.0000	0.8545
NBV	0.4557	0.1526	2.99	0.0033	1.1834	
Domestic	7.3874	0.6537	11.3	<.0001	2.6738	
Foreign	12.9098	1.8857	6.85	<.0001	2.6128	

The relative importance of Foreign and Domestic is tested by model (4) and results reported in Table 5. In the presence of net book value (NBV) and S&D (the sum of Foreign and Domestic), the coefficient of foreign pretax income (Foreign),  $\theta$ , is loaded with a value of 5.52 at a significance level of 2.4%, indicating investors view the foreign component of earnings as of much more importance relative to the domestic earnings during the valuation process. Each dollar in foreign pre-tax income is considered to add an incremental of \$5.52 value relative to the domestic earnings to MC. This result strongly supports our conjecture that realized foreign earnings are considered by investors as informative of the likely success of internationalization strategy as well as opening to new growth opportunities and therefore placed a much heavier weight relative to the domestic earnings.

Table 5  
Importance test of earnings components

Variable	Parameter estimates	Standard Error	t-Value	Pr> t	Variance Inflation Factor	Adj. $R^2$
Intercept	150.0199	74.6795	2.01	0.0464	0.0000	0.8545
NBV	0.4557	0.1526	2.99	0.0033	1.1834	
D&F	7.3874	0.6537	11.3	<.0001	4.4231	
Foreign	5.5223	2.4147	2.29	0.0237	4.2843	

## Summary

The main purpose of this paper was to investigate the degree of internationalization's impacts on publicly traded restaurant firms in the United States from 1985 to 2004. Results indicated a positive relationship between MNC and



market capitalization, suggesting that investors view internationalization as value creating and the marginal benefits brought by internationalization appear to outweigh the marginal costs. Moreover, considering the realization of foreign earnings as informative of the likely success of the internationalization strategy and opening to new growth opportunities, investors view the foreign component of earnings as much more important relative to the domestic counterpart during the valuation process by placing a significantly heavier weight on the foreign earnings component.

Strategically, it is critical to understand investor perceptions before a major decision such as internationalization is made. This paper provides a clear indication that, on average, investors consider the decision of heading into international market a positive one and they perceive the extent of internationalization as positively related to the market capitalization. Ex post, investors view foreign earnings as a strong indicator of the success of overseas expansions, with considerations of potential risks. Therefore, when the realization of foreign earnings is considered to be more than likely, overseas expansions should be deemed positively by the management. Moreover, decomposing NI into Domestic and Foreign in the presence of NBV appeared to reveal more information and investors price this piece of information accordingly.

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## A Review of Recent Tourism and Hospitality Research in China

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### Abstract

Although China's tourism has become a vital part in the world tourism market, little is known internationally about tourism and hospitality research in China. This study reviewed 500 articles published from 2000 to 2005 in China's leading tourism research journal, *Tourism Tribune*, and provided an overview of China's recent tourism and hospitality research. Results showed that research themes primarily focused on tourism attraction/resources development and management, tourism planning, and tourism industry development issues. Most research under review used a qualitative approach, while 15% of the articles employed some quantitative methods. Articles using advanced statistical techniques were scarce.

Key Words: Tourism, Hospitality, Research, China

### Introduction

While the development of the tourism and hospitality industry in China has caught much attention, tourism and hospitality research in China still remains as a relatively unfamiliar activity to international tourism and hospitality researchers. Due to language barriers and resource constraints, opinions and findings of indigenous Chinese scholars have hardly been exposed to the outside world (Zhang, 2003). Several books on China's tourism (e.g., Lew and Yu, 1995; Zhang, Pine, and Lam, 2005) have been published in English and a dozen or so articles discussing China's tourism issues could be located in international tourism and hospitality research journals (e.g., Pine, 2002; Zhang, Pine, and Zhang, 2000). However, most of the authors are Chinese scholars working in overseas universities and thus cannot represent their counterparts' activities in China. Furthermore, among these limited research works regarding China's tourism, few have focused on picturing the state of tourism and hospitality research in China. An exceptional invaluable topical review was conducted by Zhang (2003), introducing to the outside academic world different aspects of tourism research in China. Zhang's review provided an overview of China tourism research development, which is by far an important reference source for the international tourism research community to take a glimpse into the state of tourism research in China. However, in-depth research still remains void in terms of detailed analysis of research topics covered, and research methods employed, by Chinese tourism and hospitality scholars.

In recent years, indigenous researchers have paid much attention to retrospecting and reflecting on tourism research in China. Several studies have been conducted to investigate the characteristics and current state of China's tourism research but were published in Chinese only. Upon examination, these studies can be classified into two categories. While some of them took a comparative approach studying China's tourism research in parallel with international tourism research development trend (Aramberri and Xie, 2003; Xie, 2003; Zhu and Liu, 2004), others focused only on China's tourism research (Song, Wu, Lian, and Yang, 2005; Wu, Song, and Deng, 2001; Zhang, 2002; Zhang and Lu, 2004; Zhao, 2000). To some extent, past studies have investigated research themes (Song et al., 2005; Wu et al., 2001; Zhang, 2002; Zhao, 2000), research methods (Zhang and Lu, 2004), and researchers' background (Wu et al., 2001; Zhang, 2002; Zhang and Lu, 2004; Zhao, 2000) of China's tourism research, and differences of tourism research between the Chinese and international academic communities (Aramberri and Xie, 2003; Xie, 2003; Zhu and Liu, 2004). Some other researchers attempted to describe the state of tourism and hospitality research in China through conducting literature analysis.

Most of the studies mentioned above analyzed articles published before 2000 and more or less focused on limited areas (e.g., research theme) rather than providing an all-round picture of tourism research in China. The recent study by Zhang and Lu (2004) examined research articles in *Tourism Tribune* from 1999 to 2003 but only reviewed research methods used. Song et al. (2005) investigated 481 articles published in *Tourism Tribune* with a focus on topic areas. Moreover, although indigenous Chinese scholars have exerted some strenuous efforts in studying tourism and hospitality research development in China, these invaluable study results can hardly be made known to the international academic world due to language barriers. In view of these shortcomings, this study aimed to provide a comprehensive and in-depth analysis of China's tourism and hospitality research. Through a content analysis of articles published in *Tourism Tribune* from 2000 to 2005 (issues 1-5 as of October 2005) and statistical calculations of the coded research and researcher

characteristics, the authors intended to reach three research objectives: 1) to profile the content of China's tourism and hospitality research and the distribution of different research topics; 2) to identify and evaluate the current research methods used in China; and 3) to study the characteristics of tourism and hospitality scholars in China.

## Method

This study selected *Tourism Tribune* as the analytic platform. *Tourism Tribune* is one of the core journals in China and has been continuously rated as the leading tourism journal (Song et al., 2005). It is widely agreed that articles in *Tourism Tribune* can represent the level and trend of tourism research in China (e.g., Xie, 2003; Wu et al., 2001; Zhang, 2002). All articles published in *Tourism Tribune* from 2000 (issues 1-6 of volume 15) to 2005 (issues 1-5 of volume 20) were reviewed. Written discussions, conference reviews, industry practitioner interview reports by journal reporters, articles of direct translation from other languages, and book reviews were excluded from the analysis, because these types of publication do not represent research efforts of Chinese scholars. If one article was published as two or more parts in different issues of the journal due to its lengthy content, it was counted only once. Based on these criteria, a total of 500 articles were included in the database for further analysis.

Content analysis was conducted based on the abstract of all selected articles. Studies were classified into different research themes. The appearance of different themes was coded by year. All articles were also coded as "qualitative"- or "quantitative"-method dominated. Qualitative studies were further classified into two levels. Level one referred to those with simply narrative and descriptive discussions to disclose a "real" situation or "truth" based on authors' personal experience and their interpretation of other related texts. Usually, articles in this category did not explicitly state the research methods used. Level two referred to articles that clearly stated the qualitative methods employed, including semi-structured interview, focus group interview, observation, and other well documented qualitative methods. Although not exactly equivalent, level one could be regarded as the first moment "traditional period" method and level two as the second moment "modernistic phase" method in Denzin and Lincoln's (1994) "five moments" classification of qualitative research. Quantitative articles were those employed any quantitative approaches. Statistical techniques were identified and coded for the quantitative articles. It was common that both quantitative and qualitative methods were used in the same study. Author information provided in the articles was also coded and analyzed. Such information included age, gender, education level, institution affiliation, institution location, and research interests.

## Results

### *Research Themes/Topics*

Content analysis of the selected articles identified 32 research themes or topics. Some articles' research foci were quite self-explicable while others had broader or less defined scope. This could be partly explained by the difficulty of distinctively labeling some of the studies' focus. In most cases, an article covered more than one topic area. This could be attributed to the multi-faceted and complicated nature of the tourism discipline (Zhang, 2004). However, each article was classified into one theme category only according to its most expressive and prominent thematic area, even though it may also relate to other thematic areas in a less salient way. Table 1 lists the most frequently researched areas, accounting for slightly over half of the articles reviewed. Tourism scholars in China seemed to have paid much attention to tourism attraction and resource development, tourism planning, and tourism industry development at the macro economics level in the past six years. Tourism attraction/resources development and management also were the most debated topic by tourism researchers in recent years. These debates were around such issues as separating ownership and management of tourism resources (Hu, 2003; Li, 2002; Liu and Zhang, 2002; Zhong, 2002), enlisting tourist attraction companies in the stock market (Xu, 2000; Zhang, 2000), and constructing cable transportation facilities in tourist attractions (Jiang, 2000; Xie, 2000). The number of articles focusing on this area showed an increasing trend, suggesting that this topic may continue to be popular in the near future.

Tourism planning also attracted much attention from researchers. Apart from concrete technical issues, quite a number of articles discussed conceptual and theoretical issues in tourism planning. The year 2001 saw the largest number of articles focusing on tourism planning because the editorial board of *Tourism Tribune* held the China Tourism Planning Summit and chose to publish some of the research papers presented at the Summit in the journal. Articles in the category of "tourism industry development status and trend" mainly described the current development of the tourism industry, the economic contribution and importance of tourism in the national economy, the status of the tourism industry, and tourism development trends.

Chinese tourism researchers also showed their zeal in ecotourism and sustainable tourism. While most of the articles discussed conceptual issues, some did exert efforts on more applied topics such as tourists' ecological awareness. Tourism marketing and market analysis studies also gained some attention. With China's outbound tourism becoming more

significant, some researchers began to take China's outbound tourism as their study focus. As the most visible segments of the tourism industry, hotel and travel services have also been studied. Strong evidence showed that research efforts in these areas mainly concentrated on the macro economic, social, and policy environments of the hotel and travel agency segments. Seldom have researchers paid attention to the micro business operation or management mechanism within an enterprise. While a majority of articles included real-world industry issues as research themes, a substantive number of studies focused on the basic concepts and theoretical matters in tourism.

Table 1  
Top Research Themes of Reviewed Articles

Year	2000	2001	2002	2003	2004	2005	Total
1. Tourism attraction/resources/product development, management and protection	6	8	9	13	14	9	59
2. Tourism planning	4	13	7	7	5	1	37
3. Tourism industry development status and trend	6	6	7	10	6	0	35
4. Ecotourism and sustainable tourism	4	5	6	7	8	5	35
5. Tourism marketing and market analysis	0	7	9	2	8	5	31
6. Hotel business environment and management	6	6	7	5	4	3	31
7. Basic concepts and theoretical issue in tourism and hospitality	7	6	2	3	6	6	30
Subtotal	33	51	47	47	51	29	258
Total number of articles in the year	72	85	80	82	102	79	500

In addition to these popular topics, city/urban tourism attracted quite a number of Chinese tourism researchers' interest, whereas to a lesser extent, rural tourism was also discussed by some scholars. Other topics included pro-poor tourism, legal issues in tourism and hospitality, tourist behavior, world heritage and tourism development, convention tourism and management, and tourism impacts. Some research topics, such as service quality and customer satisfaction, technology application and e-commerce in tourism, and human resources issues in tourism and hospitality, acquired little research attention, even though these areas are very important in the workplace and for the industry's development. Some Chinese scholars have also taken leisure activities as a research focus. Although mainly positioned as a tourism and hospitality journal, *Tourism Tribune* published seven articles exclusively studying leisure phenomena.

Articles published in *Tourism Tribune* covered a wide range of issues with some topics emerged sparsely. These topics included tourism criminology, tourism history, cruise tourism, tourism taxation, tourism satellite account, holiday tourism and economy, club tourism, and movie-induced tourism. The number of articles on these topics was not significant, with some topics (e.g., club tourism, movie-induced tourism) having only one article published.

### Research Methods

As shown in Table 2, 85% of the articles used qualitative methods, while only 15% employed some type of quantitative methods. Among the qualitative articles, the vast majority did not state anything about the methodology. In this review, these articles were categorized as level one qualitative studies. In effect, these articles resembled the format of an essay or opinion piece more than that of a research paper. Normally, an article in this category had a diffusive discussion on a general issue. Although such an article would have a focus, the authors tended to discuss the issue from various perspectives, or simply divide the issue into a variety of sub-issues and elaborate on each sub-issue. In most cases, the articles were written based on authors' personal experience, understanding, judgment, and evaluation on a certain phenomenon. Frequently, the current status was described and problems identified, followed by suggested solutions and recommendations. The limited number of level two articles employed open question interviews, semi-structured interviews, and content analysis as the data analysis technique.

Most of the quantitative articles used questionnaire survey as the data collection method, whereas some used secondary data. Other quantitative data collection methods included web searching, geographic measurement, geographic information system (GIS), and small group evaluation. Upon further examination of the statistical techniques, nearly 80% of the survey studies used only descriptive statistics, such as frequencies, percentages and means. In these articles, the authors seldom mentioned the confidence or significance level, or made any statistical inferences. More sophisticated statistical techniques were employed in a limited number of articles. These techniques included reliability test, t test, ANOVA, different types of correlation test, F test, factor analysis, cluster analysis, discriminant analysis, linear and

nonlinear regressions, canonical correlation analysis, and multi-dimensional scaling. More advanced statistical methods, Artificial Neural Network Model (ANNM) and Structural Equation Modeling (SEM), were also found in two articles each. However, in contrast to the range of statistical techniques, the frequency of statistical applications was limited.

Table 2  
Research Methods Distribution

Method	Frequency	Percentage
Qualitative	425	85.0
Level 1 <sup>a</sup>	413	82.6
Level 2	12	2.4
Quantitative	75	15.0
Questionnaire survey	47	9.4
Secondary quantitative data	15	3.0
Other	13	2.6
Total	500	100.0

<sup>a</sup>Level 1: qualitative article following an essay format; Level 2: qualitative article clearly stating the methods used

### Authorship Information

A total of 785 author name exposures were found in the 500 articles, of which 105 author names appeared more than once. Thus, 604 individual authors contributed to the 500 articles. The following demographic statistics were based on these 604 authors. Of the 500 articles, 303 (60.6%) were sole authorship and 197 (39.4%) were multiple authorship papers. Specifically, 137 articles had two authors, 45 had three authors, 11 had four authors, one had five authors, two had six authors, and one had seven authors. Among these 604 authors, 499 of them (82.6%) contributed only one article in the journal in the examined period (2000-2005); 105 (17.4%) published more than one article. A further examination found that 62 authors contributed two articles, 26 authors contributed three articles, eight authors contributed four articles, four authors contributed five articles, another four authors contributed six articles, and the most productive author contributed eight articles.

### Gender and Age

Of the 604 authors, 589 (97.5%) of them reported their gender, with 380 males and 209 females. The number of male authors was nearly double that of female authors. Year of birth was reported by 538 (89.1%) individuals. The authors' ages had a range from 21 to 82, with a mean of 37.8. The age data were recoded into categories to examine the authors' age distribution. Close to two-thirds (63.9%) of the authors were 21-40 years old and 23.6% of them were 41-50 years old and 12.5% were older than 50 years. This showed that most of the authors were quite young.

### Education Level and Occupation

Among the 604 authors, 374 (61.9%) provided information about their education levels. Of those, 88 (23.5%) held a PhD degree; 84 (22.5%) were PhD students when they published their articles; 70 (18.7%) had a master's degree; 116 (30.0%) were master's students at the time of their papers' publication; and 14 (3.7%) identified themselves as undergraduate students. Information on occupation was collected from 524 authors. Among them, 290 (55.3%) were university faculty members, 161 (30.7%) students, 49 (9.4%) government officials, and 19 (3.6%) managers. Of faculty members, 85 (29.3%) were professors, 114 (39.3%) associate professors, and 82 (28.3%) lecturers. Authors employed by research institutions accounted for 5.7% of the 599 who provided information on their affiliation, while those worked in tourism administrations accounted for 5.5%. Of those 33 individuals employed by tourism administrations, 15 were from China National Tourism Administration (CNTA), and 28 were from local (provincial or city level) tourism administrations. Only 3.2% of the authors were private enterprise employees.

### Discussions and Conclusion

This study reviewed 500 articles in *Tourism Tribune* from 2000 to 2005 to provide an understanding of China's tourism and hospitality research. Results indicated that tourism researchers in China were mainly interested in such topics as tourism attraction/resources development, management and protection, tourism planning, and macro issues on tourism industry development. Tourism researchers in China were more likely to be young (21-40 years old) and working or studying at universities. Male researchers outnumbered female researchers almost two to one.

Differences could be found when comparing tourism and hospitality research in China and that in the international academic world. Zhang (2004) conducted a comprehensive review of articles published in the *Annals of Tourism Research* in the past 10 years. He found that the most widely studied research themes or topics were tourist behavior and psychology, tourism marketing and market studies, cultural tourism, and tourism impact, in the order of article numbers. However, these

topic areas have only emerged as new research concerns in the past three or four years in China. It seemed that China's tourism research still lagged behind the marching order of international tourism research. While international researchers have paid more attention to the demand-side issues of tourism (e.g., tourist behavior, tourist psychology, tourism marketing, tourism market analysis), Chinese tourism researchers still focused their interests on the supply-side issues (e.g., tourism attraction/resources/product development, management and protection, tourism planning, and tourism industry development). Based on results of this study, the authors suggested that Chinese tourism scholars should learn more from their international counterparts, especially in research methods. They should also communicate more with the international tourism academic community.

This study has several limitations. First, it only reviewed articles published in *Tourism Tribune*. Although the journal is widely respected as the leading tourism research journal in China, it may not represent all aspects of tourism research in China. Second, data collected in this study, especially regarding authors' information, were incomplete. The authors' demographic description cannot be generalized to the entire Chinese tourism researcher population. This paper was a preliminary attempt to introduce China's tourism and hospitality research to the international academic community. Future studies can expand the article reviewing scope by incorporating other influential tourism research journals to present a broader and more in-depth understanding in this line of inquiry.

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## Exploring the Typologies of Hospitality Employees: Person-Organization Fit

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### Abstract

Person-organization fit plays an important role in predicting employee attitudes as well as organizational performance and profitability (Tepeci & Bartlett, 2002; Verquer, Beehr, & Wagner, 2003). Since a good person-organization fit has a positive impact on employee work attitude and performance, this study sought to reveal possible relationships between hospitality employee personality traits and their preferred organizational cultures. Findings categorized employees into four groups by their personal characteristics and organizational culture preferences. These results could provide useful information for hospitality managers to re-examine their organizational cultures, recruit suitable employees to fit their organizations, and to maximize performance.

**Key Words:** Personality, Organizational Culture

### Introduction

Taiwan is becoming a hospitality business oriented country. This can be seen from the huge emigration of major factories to low labor cost countries (e.g. mainland China), the ongoing development of hotels and the booming number of educational institutions offering hospitality training programs. In order to reach the goal of attracting 5 million international tourists to Taiwan annually by 2008, the government of Taiwan is investing \$ 2.4 billion U.S. in developing attractive new tourist destinations, increasing tourist markets, promoting tourism businesses, and promoting tourism related investment (Taiwan External Trade Council, 2006). These issues highlight the importance of the hospitality business in Taiwan.

The major hospitality businesses include hotels and restaurants. There are four levels of hotels in Taiwan: (a) 60 international tourist hotels with 35 more under construction; (b) 27 tourist hotels, (c) 3,253 general hotels, and (d) 801 legal and registered host families (Taiwan Tourism Bureau, 2006). The current total number of employees working in hotels and restaurants in Taiwan is 236,007 (Taiwan Tourism Bureau, 2006). The demand for hospitality employees in Taiwan is estimated to be 817,670 by 2011 (Wu, 2002). Part of this demand is due to the fact that hospitality employees are paid low wages and have a high turnover rate (Wu, 2002). While low wages may account for part of the high employee turnover rate, there may be other factors as well, such as how well the employee fits in the organization.

### Dimensions of the Fit in Organization

According to Nadler and Tushmans' (1980) congruence theory, there are six areas involved in examining the fit of organizational components. They include the fit between (1) individual and organization, (2) individual and tasks, (3) individual and informal organization (e.g. leader behavior and colleague relationships), (4) tasks and organization, (5) tasks and informal organization arrangements, and (6) organization and informal organization. A good person-organization fit is important for effective organizations (Goodman, 1999). It could influence job choice decisions by individuals, like the attractiveness of an organization to applicants, as well as selection decisions made by recruitment interviewers (Cable & Judge 1996). Person-organization fit could also affect employee job satisfaction, job tenure, and career success (Bretz & Judge, 1994). Person-organization fit has been shown to predict employee attitudes, and these attitudes, in turn, predict organizational performance and profitability (Tepeci & Bartlett, 2002). Furthermore, successful person-organization fit has a positive impact on the organization, may be seen to reduce role stress, role conflict, reduce turnover intention, and increase performance (Verquer, Beehr, & Wagner, 2003).

### Measurement of Personality

Personality traits are found to be associated with certain types of behavior (Thomas, 2004; White & Bednar, 1991) and are categorized into different dimensions in different scholars' personality theories. Among the various personality theories, Jung's is the most often used in categorizing personality (Champagne & Hogan, 2002). Based on Jung's personality theories, Champagne and Hogan (2002) developed a Personal Style Inventory (PSI) in measuring personality traits and personality styles. The PSI categorized personality traits into four opposite dimensions, which include Extraversion vs. Introversion, Sensing vs. Intuition, Thinking vs. Feeling, and Judging vs. Perceiving.

Extroverts devote themselves to interacting with people, events and rules, and value meeting the expectations of others and society (Champagne & Hogan, 2002) and they are energized by outer world and focus on people and things (Gardner & Martinko, 1996). Introverts are more interested in their inner beliefs, expectations, desires, values and logic (Champagne & Hogan, 2002) and focus on personal thoughts and concepts (Gardner & Martinko, 1996). Thinkers make decisions based on logic, evidence, and analysis (Champagne & Hogan, 2002), critique, reason, criteria, and systematic

(Gardner & Martinko, 1996). Feelers make decisions based on empathy and personal values (Champagne & Hogan, 2002; Gardner & Martinko, 1996). Judges like to explore different facets in puzzling out problems and make definite decisions and focus on consequences (Champagne & Hogan, 2002) and they are organized; planned, settled, goals setting oriented (Gardner & Martinko, 1996). Perceivers prefer to gather as much information as possible with no definite judgment and remain flexible in making and after making decisions (Champagne and Hogan, 2002; Gardner & Martinko, 1996). The combination of preferred methods of processing, judging, receiving, and responding to the external and internal world shapes one's personality (Jung, 1923).

### **Organizational Culture Assessment**

Many studies have categorized organizational culture into multi-dimensions. Deshpande and Webster (1987) offered a two-dimensional continuum (internal/external orientation, and flexibility/control orientation), and based on these dimensions, Quinn (1988) developed a typology for measuring four organizational cultures: clan, adhocracy, hierarchy, and market. Cameron and Quinn (1999) developed the Organizational Culture Assessment Instrument (OCAI). Quinn (1988) defined these four cultures as follows: Clan organizational culture had the characteristics of valuing cooperative teamwork, facilitative leaders, cohesion, and committed participation. Adhocracy organizational culture values openness, visionary leaders, creativity and resource innovation. Hierarchy organizational culture features stability, monitoring leaders, timeliness, and efficient control. Last, market organizational culture emphasizes achievement, driven leaders, goal orientation, and productive competition (p. 58).

Examination of organizational culture can help organizations to reveal strengths and weaknesses and to develop strategies to improve their performance. Furthermore, a good fit between employee personality and organizational culture will also increase employee job satisfaction and performance while reducing work stress and turnover intention (Chow, Harrison, McKinnon, 2001; Goodman, 1999; Tzeng, Ketefian, & Redman, 2002). In sum, this literature reviewed the related issues of organizational culture and the relationships between an organization and individual behaviors. Since little research has been conducted to investigate the relationships among the eight personality traits (Extraversion, Introversion, Sensing, Intuition, Feeling, Judging, Thinking and Perceiving) and preferred organizational cultures, this lack of research has led to this study. The research methodology used is described next.

### **Methodology**

The purpose of this study was to investigate the relationships between employee personality traits and preferred organizational cultures in the international tourist hotels in Taiwan and to answer two research questions:

- Research question 1: What typologies of hospitality employees are found by clustering their personality traits and preferred organizational cultures?
- Research question 2: Will the four opposite dimensions of personality traits (Introversion/Extraversion), (Intuition/Sensing), (Thinking/Feeling), (Judging/Perceiving) be effective in predicting employee organization cultural preferences?

### **Samples**

Twenty hotels were chosen using the stratified sampling method from the 60 international tourist hotels in four geographic locations in Taiwan: northern (10), central-western (2), southern (6), and eastern (2). Thirty questionnaires were mailed to each hotel. In all, 600 surveys were distributed to administrative and non administrative employees. The human resource managers of the participating hotels were mailed the surveys. The return rate was 49.3 % as 296 surveys were useable.

### **Survey Instrument**

The survey instrument included three parts. First, there were ten questions on demographic data regarding work divisions, age, gender, marital status, monthly salary, tenure, length of service, education levels, and college or vocational school major. Second, the Personal Style Inventory (PSI), with 32 paired questions, adapted from Champagne & Hogan's (2002) instrument, was used. The third part consisted of the Organizational Culture Assessment Instrument (OCAI) (Cameron & Quinn, 1999) comprising 24 questions in which participants were inquired to score their perceptions of how they thought their organizations should be (preferred culture) in organizational characteristics, leadership, employee management, organizational glue, emphasized competitive strategies, and criteria of success. The relative levels of preference were established by scoring from 0 to 100, with "0" corresponding to "least preferred" and "100" corresponding to "most preferred."

### **Validity and Reliability and Statistical Methods**

A team of servers, housekeepers, chefs and managers from the selected hotels assessed the survey and based on their feedback, adjustments were made by the researcher to enhance the validity. There were 30 volunteers from the chosen hotels who participated in a pilot study leading to additional modifications to achieve validity and reliability. The average reliability of Cronbach alpha coefficients was .69 for the PSI and .71 for the OCAI (Organizational Culture Assessment Instrument). The major statistical methods that were applied in this research included descriptive analysis, cluster analysis, and discriminant analysis.

### **Research Results**

#### *Respondent Profile*

The overall gender distribution of the participants in this study was 38% males and 62% females. Marital status was 41.3% married, 56.7% single, and 2% in "other status." The age of most ranged between 20-30 years old (44.3%). This suggested that the international tourist hotels in Taiwan tend to have young employees. Further, 66.7% were college graduates, 33% had graduated with professional hospitality backgrounds, which included: Hospitality Management (13.7%), Tourism (11.7%), Chinese and Western Culinary Arts (4%), Baking and Pastries (1.3%), and Home Economics (2.3%). In examining the monthly salary and daily working hours, the frequency results showed that 33% of the employees had monthly salaries that ranged from \$17,000 to \$45,999 N.T. (\$492 to \$1,333 U.S.), and 64.5% of the employees had monthly salaries under \$35,999 N.T. (under \$1,043 U.S.).

#### *Employee Typologies*

Before facilitating the cluster analysis, all standardized data of the eight personality traits and four types of preferred organizational cultures were assigned as variables and were run through the SPSS 11 program. Next, a hierarchical cluster analysis using Ward's minimum variance methods was performed. This was followed by the K-mean cluster method. Since cluster analysis is sensitive to outliers, the outliers were removed during the procedures. The optimal number of clusters was chosen based on the internal validation of the various cluster solutions, the centroid estimate results, and the dendrograms. All variables were significant in the ANOVA results of the cluster analysis. The final cluster analysis categorized the employees into four groups with high internal homogeneity and high external heterogeneity.

Group 1 had the highest score in preferring clan culture (1.34) and the lowest score in preferring hierarchy (-.123) and adhocracy cultures (-.921) among these four groups; they also had the highest scores in Feeling (1.149) and Perceiving (.864) and the second highest scores in Intuition (.329) and Extraversion (.052). This result implied that the higher the scores in Feeling and Perceiving and the lower the scores in Thinking personality traits, the greater the employee preference for clan organizational culture.

Group 2 had the second highest score of preferring clan organizational culture (1.15). In examining the personality traits, this group exhibited extreme opposite scores on the four personality dimensions, which included the highest scores in Extraversion (.979), Sensing (.967), Thinking (1.1) and Judging (.875), and the lowest scores in Introversion (-1.01), Intuition (-.988), Feeling (-1.122), and Perceiving (-.885) among these four groups. Like Group 1, this group also preferred clan culture, but it had the second highest score in preferring clan culture (1.15) compared with the other three groups while at the same time, it had the lowest score in preferring market culture (-.45).

Group 3 showed the greatest preference for the market culture (.255). It scored second highest in Introversion (.125), Thinking (.667) and Judging (.804), and the third highest in Extraversion (.125), Intuition (-.508), Feeling (-.643), and Perceiving (-.77). In regard to their preferences for organizational culture, this group had the strongest preference toward market culture and the second highest scores in both hierarchy (.279) and adhocracy (-.035) organizational cultures.

Group 4 had the strongest preferences in both adhocracy (.321) and hierarchy (.307) organizational cultures as well as the least favored clan culture (-.355) among the four groups. Employees in this group tended to have the highest scores in Introversion (.146) and Intuition (.402) and the lowest scores in Extraversion (-.143) and Sensing (-.51). The more strength in INFP (Introversion, Intuition, Feeling and Perceiving), the more the employees tended to prefer adhocracy and hierarchy types of organizational cultures. These results answered research question 1 regarding the classification of hospitality employees by personality traits and organization cultural preferences.

Having successfully distinguished the unique characteristics of the four groups, the clusters were subjected to discriminant analysis to determine which features were the main predictors of cluster membership. Two functions of discriminant analysis include: (1) fulfilling a predictive purpose by formulating a linear discriminant function and describing the importance of the independent variables in differentiating among known group memberships, and (2) fulfilling classification purposes by validating the predictive discriminant function as a means of classifying new observations of unknown group membership samples from the same populations (Smith, 2004). The discriminant statistical technique aimed to investigate if the eight personality traits could be used as predictors to identify employee preferred organizational cultures.

The standardized discriminant function coefficients from the results of discriminant analysis found three functions (See Table 1.). The first function had the highest Eigenvalue and Canonical correlation, which manifests that the first function was the best and most efficient function in predicting group membership. The results of Eigenvalues, Wilk's Lambda, Chi-square, *df* and significance are summarized in Table 2. The first function had high and positive coefficients for Judging (0.662), Extraversion (0.436), Sensing (0.387) and Introversion (0.372), and a high negative coefficient for feeling (-0.532). These results answered research question 2 and suggested that Judging, Extraversion, Sensing, Introversion, and Feeling personality traits acted as strong predictors in classifying the four groups of employees regarding their preferences for different organizational cultures.

Table 1.  
Summary of Eigenvalues and Wilks' Lambda of Discriminant Analysis

D	Eigenvalue	Var.	Canonical Correlation	$\Lambda$	$\chi^2$	<i>df</i>	Sig.
1	2.338	64.3	.837	.122	602.849	36	.000
2	1.173	32.2	.735	.409	256.866	22	.000
3	0.126	3.5	.335	.888	34.164	10	.000

Note. D = Function,  $\Lambda$  = Wilks' Lambda,  $\chi^2$  = Chi-square, Var. = % of Variance

## Discussion

This research study has classified the sampled hospitality employees with their homogenous personality traits and preferred organizational cultures into four different groups. That is, employees who were strong on Feeling (characterized by being subjective, humane, personal, harmonious, empathetic, appreciative, values oriented, compassionate, considerate) and Perceiving (characterized by being flexible, curious, spontaneous, tentative, undaunted by surprise, and open to change) (Gardner & Martinko, 1996) had a strong preference for clan culture organization. Some connections between Feeling and Perceiving personality traits might be seen from the key descriptions (cooperation, team work oriented, cohesion, and participation) of clan organizational culture in the organizational culture profile of Cameron and Quinn (1999). Employees who had the strongest Introversion and Intuition personality traits, had a strong preference for both hierarchy and adhocracy organizational cultures. These characteristics also seem to match the values of adhocracy organizational culture (creativity, growth, open, and innovation). In addition, employees who had the strongest Extraversion (E), Sensing (S), Thinking (T), and Judging (J) personality traits, had a moderate preference for clan organizational culture. According to Champagne and Hogan (2004), those with E, S, T, and J personality traits are analytical, impersonal, decisive, logical, organized, matter of fact, practical, solve problems by applying past experience, and want immediate and tangible results from efforts. It seems that this group of employees also had a moderate preference for clan organizational culture.

Cluster results such as these might serve as a reference for matching the right employees with suitable organizations. Further, the discriminant results suggest that certain personality traits, such as Judging, Extraversion, Sensing, Introversion, and Feeling acted as strong predictors in classifying the four groups of employees regarding their preferences for different organizational cultures. Therefore, these results could serve as a reference point for administrators in recruiting and training employees to fit their organizational cultures. It is essential for management to examine its own organizational culture and meticulously select employees with the appropriate and applicable strengths to fit their organizational cultures.

## Limitations and Recommendations

It is important to address the limitations of this study which might be explored in future research. First, this research only concentrated on the eight personality traits which were developed under Jung's personality theory. Therefore, it did not represent all different personality traits described by different personality theories. Second, this study sampled only 20 international tourist hotels in Taiwan; thus, the results may not be representative of all the different types of hotels in Taiwan. Further research could be done in other kinds of hotels and restaurants. This might reveal if the outcomes will be generated differently. Either way, this could aid management in recruiting, selection, training, and supervising employees with different characteristics. Last, to substantially gain a deeper understanding of different employees and their perceptions of preferred organizational cultures, the researcher suggests a study employing qualitative research methods be done, such as interviews with individuals or focus group interviews. Furthermore, this research could be applied in different hospitality related businesses or different service industries to reveal the relationships between personality traits and preferred organizational cultures in these different but related businesses. The results might provide more information for managerial references.

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## Electronic Word-of-Mouth Referral for Prospective Hotel Customers

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### Abstract

This study examined the review information voluntarily posted by hotel guests on the TripAdvisor.com site to uncover generalizable suggestions and theses for hotel management. Results of a content analysis of the site, followed by a series of other descriptive analyses, indicate that hotel guests tended to engage in electronically communicating their lodging experience equally frequently by posting their evaluations and emotions on the site. Also, the level of service and average room rates appear to influence the relationships of selected hotel performance attributes with both overall guest satisfaction and return intentions. Some managerial implications surrounding this e-WOM channel are discussed.

Key Words: Online hotel review; e-WOM, return intention, customer satisfaction; purchase intention

### Introduction

The Internet has replaced a traditional one-to-one advertising mode, *word-of-mouth* (WOM), with a one-to-many or many-to-many advertising mode by enabling customers to share their consumption experience with prospective customers and service providers through various online communication channels. Online companies (e.g., TripAdvisor.com, fodors.com, besthotel.com, mytravelguide.com, Zoomandgo.com, etc.) have successfully launched their business on the Internet by collecting customers' reviews of hotels and other travel destinations. These online communication businesses have benefited potential customers and travelers in planning their trips as well as making purchase decisions with ease and confidence (Mohl & Ridder, 2003). Moreover, these "voluntary" reviews are believed to be much more valuable and trustworthy than typical survey-based customer responses in that they are based on the customer's free and voluntary opinions about what he or she experienced and that they are neither elicited nor framed by the company or researchers (Stieghorst & Ridder, 2004).

As today's WOM channels are increasingly digitized (e.g., TripAdvisor.com), their potential impacts are enormous, because what is posted on these electronic communication boards can reach the multitude of prospect customers in a "click" of the moment. In the lodging industry, for example, numerous sources indicate that the Internet is increasingly used not only as a medium for making reservations but also as a channel of open forums about customers' lodging experiences (Pitta & Fowler, 2005). The continuing success of several related Internet sites, such as TripAdvisor.com, is indicative of widespread use of these sites by customers and, consequently, by managers who are conscious of market responses to their company's performance.

While the significance of these Internet sites as a primary source of information for both company performance reviews and customer purchase decisions is expected to grow every day, commensurate research to understand the validity of the information posted on these sites has been meager. To the extent which these Web sites provide valid information for both prospective customers and hospitality management, a systematic, public feedback system can be established through these sites to aid hospitality companies in improving their future performance. To address such an imminent research need, especially in the hotel industry, this study undertook an exploratory step to examine whether the information posted on these sites possesses internal validity. In particular, the study focused on understanding how consistent posted compliments and complaints were with the expected level of service and room rate. More specifically, the objectives of this study were to (i) assess whether or not the hotel industry as a whole met guest expectations, framed by a widely adopted service level indicator (i.e., Mobile Star Rating system), (ii) determine the extent to which room rates affected guests' overall evaluations of hotel offerings and their repurchase intentions, and, thereafter, (iii) develop general recommendations for hotel management to plan its offerings.

### TripAdvisor.com as a Major Hub for Better Travel Decisions

With an exponential growth of the Internet commerce, customers are using the Internet more often than ever before for many purposes. They often research their purchasing decisions by seeking opinions of others on various Web sites before they buy (Pitta & Fowler, 2005). In the hospitality industry, in particular, a plethora of Web sites are dedicated to providing customers with third-party opinions and insights into destinations, hotels, restaurants, and travel so as to assist

in prospective purchase decisions. Among them, Tripadvisor.com, a Web site in operation since 2000, has been positioned as a leading global travel information and advice Web site, based on its database containing independent customers' testimonies and evaluations of their real experiences with hotels and other travel-related products (Tripadvisor.com, 2005). Many unique characteristics and services are available on Tripadvisor.com to help its customers make a better and more accurate travel plan in conjunction with their needs and budget (Tripadvisor.com, 2005). A variety of filtering services selectable on the site are designed to make customers easily narrow down their hotel selections and sort hotels by price, location, and level of service (e.g., star rating). Guest reviews of the hotel are featured services helping prospective guests choose a hotel with ease and confidence while planning a future trip. Based on both the quantity and quality of posted reviews on the site, a popularity index shows a ranking of all listed hotels as well. More than 135,000 hotels worldwide are compared via more than 1 million reviews in this ranking. On this site, reviewers provide their open-ended comments and their ratings of the hotel on a set of attributes including room, service, value, cleanliness, dining, activities & gym, and pool. In addition, they also rate their overall satisfaction with the hotel and intention to return to the hotel.

It is logical to expect that, dependent upon the popularity index of a destination hotel, nature and frequency of reviews about the hotel are expected to be different. The nature and frequency of reviews about the hotel is then likely to determine, at least partially, future demands for the hotel. Bearden and Oliver (1985) reported that both compliments and complaints played a key role in determining customers' future attitudes and purchase behaviors. Cadotte and Turgeon (1988) analyzed the frequency and type of compliments and complaints received by lodging executives from their customers in order to identify key satisfiers and dissatisfiers. Typically, attributes, such as helpful attitudes of employees, cleanliness and neatness of the property, service quality, employee knowledge, spaciousness of the property, and quietness of the surrounding, were key satisfiers from the perspective of hotel guests. Meanwhile, among most frequently received complaints are on attributes such as room rate, meals or other services, speed and quality of service, parking availability, employee knowledge and service, quietness of the surrounding, and availability of accommodation. Even though these compliment and complaint attributes do not represent the customer's complete experience with a hotel, they shed light on the key performance attributes that are generalizable across lodging properties.

Even though there is almost a 20-year gap between Cadotte and Turgeon's study (1988) and the present study, the key performance attributes on which hotel guests express their compliments and complaints are much alike. Their study found that hotel guests frequently raised compliments and complaints on employee service, cleanliness, value, and other available facilities of hotels. In comparison, TripAdvisor.com has been evaluating by using seven performance attributes such as room, service, value, cleanliness, dining, activities and gym, and pool. An underlying assumption in this case is that guests' ratings on these seven attributes would determine largely their overall satisfaction with the hotel and their intention to return to the hotel.

## Methods

This study chose Tripadvisor.com to analyze guest reviews of hotels in the United States. Tripadvisor.com was chosen because it was one of the most comprehensive hotel review sites integrating a variety of reviews from real customers, guidebooks, and other available online commentaries (Mohl & Ridder, 2003). The site also provides a popularity index for hotels in a given area. Due to the frequent update of the Web site, this study conducted a content analysis of 2,000 guest reviews for a fixed period of October 1 through October 15, 2005. The 2,000 reviews were extracted from the site based on a stratification of 10 guest reviews per hotel, 10 "most" and "least" popular hotels (n=20) per destination, and top 10 most popular US travel destination cities, as suggested by the popularity index of the site. This study selected top 10 ranked hotels and bottom 10 ranked hotels, respectively, in each destination so as to maximize comparability between satisfiers and dissatisfiers of hotel performance attributes. The 10 popular US destinations included New York City, Houston, Orlando, San Francisco, New Orleans, San Antonio, San Diego, Las Vegas, Myrtle Beach, and Atlanta (see [http://www.tripadvisor.com/Hotels-g191-United\\_States-Hotels.html](http://www.tripadvisor.com/Hotels-g191-United_States-Hotels.html)).

The analysis of this study was taken mainly in two different directions. First, a total of 20 hotels in each destination were evaluated separately by their ownership (i.e., chain vs. independent), Mobile star ratings, guests' ratings, number of rooms, and average room rate. Then, 10 most recent customer reviews of each hotel were analyzed based on each customer's overall ratings of the hotel, room, service, value, cleanliness, dining, activities and gym, and pool. Secondly, customers' return intention to the hotel was evaluated along with their all written comments. Tripadvisor.com provided quantitative data as it used a five-point rating scale, anchored from 1= strongly disagree to 5 = strongly agree, to evaluate guests' overall satisfaction with the hotel and their perceptions of the hotel's performance on room, service, value, cleanliness, dining, activities and gym, and pool. Also, the guest's return intention was measured with a four-point scale labeled from 1= no way, 2= probably not, 3= most likely, and to 4= absolutely.

Descriptive analyses were conducted to better understand the overall characteristics of hotels and mean scores of guests' hotel ratings, satisfaction, and return intention. A series of *t*-test was employed to determine major attributes that distinguished the most popular hotels from the least popular hotels. A series of ANOVA was conducted to assess whether levels of hotel service and room rates made differences in guests' evaluations of hotel offerings, their satisfaction, and their return intention.

## Results

As of October 15, 2005, a total of 2,040 hotels in the 10 destinations were listed on the site excluding unranked 384 hotels. Since this study reviewed 200 hotels in the 10 destinations, roughly 10% of all hotels listed on the site were analyzed. Of the 200 hotels, this study eliminated 14 hotels due to incomplete information about hotel operations and reviewers' ratings. This study used customers' average scores of the 9 measurement items for further analyses, namely, room, service, value, cleanliness, dining, activity and gym, pool, overall satisfaction, and return intention. A preliminary extensive content analysis of the posted guest reviews supported use of the first 7 performance-specific attributes.

Results of the preliminary content analysis indicated that, regardless of the level of hotel service, one of the frequently-mentioned compliments and complaints was the location of the hotel, which was believed to be one of the key factors affecting hotel room purchase decisions. It still seems, however, that, when judged from the frequency of review comments, customers' expectations of hotel performance were influenced to some extent by the level of service indicated by the hotel's star rating. For example, the guests who stayed at 1 or 2 star hotel establishments expressed a tendency to want to have just a clean and comfortable room and friendly and helpful employee services, which were considered to be essential functional offerings of all lodging companies. The frequency of review comments also indicated that those who stayed at 4 or 5 star hotels tended to expect more than just these basic offerings from their hotel. Similarly, when judged from the frequency of complimentary or complaining reviews, the content analysis revealed that in general guests tended to either praise or complain about their hotel stays on the 7 performance-specific attributes more frequently than on other aspect of hotel performance.

Table 1 summarizes descriptive statistics of sample hotels by destination. Among the hotels of the 10 destinations more than two-thirds of the hotels were classified as chain-affiliated and approximately 44% were categorized as upscale and/or luxury properties. As expected, hotels in New York City appeared to charge the highest average room rates (\$358), followed by hotels in San Francisco (\$210). Hotels in Myrtle Beach (\$97) offered one of the lowest priced accommodations. Overall, 54% of the hotels ( $n=100$ ) were regarded relatively highly, while 46% (86) regarded low by dissatisfied customers.

Table 1  
Classifications of Sample Hotels by Destination ( $n=186$ )

	New York (20)	Houston (17)	Orlando (20)	San Francisco (18)	New Orleans (18)	San Antonio (19)	San Diego (18)	Las Vegas (20)	Myrtle Beach (20)	Atlanta (16)
Ownership										
Chain	9	13	16	14	13	15	12	12	10	15
Independent	11	4	4	4	5	4	6	8	10	1
Mobile Rating										
1 – 2 star	8	4	7	6	5	8	9	8	9	4
3 stars	3	4	4	1	2	3	2	6	3	5
4 – 5 stars	6	7	7	10	7	6	5	4		6
# of Rooms										
> 50	2			5	3	2	5		2	
50 – 150	6	5	4	5	3	6	6	5	14	3
151 – 300	4	7	3	5	6	3	4	6	1	6
301 – 500	3	5	3	2	2	3	1	3	2	5
> 500	1		6		2	1	1	5		1
Room Rates										
< \$150	9	8	9	8	5	10	10	11	15	7
150 – 300	2	8	5	5	10	8	7	4	2	6
> \$300	9	1	6	5	3	1	1	5	3	3
Popularity										
Most popular	10	10	10	10	10	10	10	10	10	10
Least popular	10	7	10	8	8	9	8	10	10	6



The results of chi-square analysis indicated that the most popular hotels included in this study appeared to be more chain-affiliated than independently owned ( $p < .05$ ), showing the ratio of 81 to 19 and they were classified as at least 3-star or better properties ( $p < .05$ ). In comparison, the least popular hotels were classified as either 1 star or 2 star hotels, which seemed to indicate that Tripadvisor.com's popularity index coincided closely with the star rating system. That is, there was a relatively distinct performance gap between the group of 1 and 2 star hotels and that of 3, 4, and 5 star hotels.

As expected, the *t*-test results revealed a sheer presence of significant differences between the popular and unpopular hotels in the mean scores of guests' overall ratings of room, service, value, cleanliness, dining, activities & gym, pool, overall satisfaction, and return intention ( $p < .01$ ). The popular hotels seemed to maintain their properties clean and offer rooms in a working order, while the unpopular hotels seemed to perform undesirably on all the performance attributes as indicated in the significantly low mean scores.

In addition to the popularity index, this study also assessed whether guests' evaluations of hotel performance, their satisfaction, and return intention could be differentiated by the hotel's star rating and room rate, using ANOVA with Duncan's multiple range test (see Table 2). To secure sufficiently large sample sizes in the ANOVA cells, but not to undermine consistency in interpretation, the hotel star ratings were re-categorized into Group A to include all 1 and 2 star hotels, Group B to include 3 star hotels, and Group C to include 4 and 5 star hotels. Of the three new groups of hotels, Group A (i.e., 1-2 star-rated) hotels consistently showed significantly lower performance scores than the other hotels on the performance attributes including value, dining, pool, and intentions. On the other five attributes (i.e., *room*, *service*, *cleanliness*, *activities & gym*, and *satisfaction*), however, all three groups of hotels resulted in significantly different mean scores.

Table 2  
Hotel Performance by Star Ratings and Room Rates

Dependent Attributes	Star Rating (n)				Room Rate (n)			
	1 – 2 (68)	3 (33)	4 – 5 (58)	Duncan's Multiple Range Test <sup>a</sup>	<\$150 (92)	\$150– \$300 (57)	\$300< (36)	Duncan's Multiple Range Test <sup>a,b</sup>
Room	1.91	3.97	4.45	A, B, C	2.12	4.28	3.95	A, BC
Service	2.04	3.94	4.41	A, B, C	2.24	4.23	3.97	A, BC
Value	2.10	3.91	3.91	A, BC	2.33	3.98	3.50	A, B, C
Cleanliness	1.97	4.00	4.59	A, B, C	2.20	4.42	3.94	A, BC
Dining	2.07	3.75	4.12	A, BC	2.22	3.98	3.76	A, BC
Activities & Gym	1.87	3.52	3.98	A, B, C	2.01	3.84	3.58	A, BC
Pool	1.86	3.77	4.00	A, BC	2.13	3.95	3.80	A, BC
Satisfaction	1.84	3.88	4.34	A, B, C	2.04	4.23	3.78	A, BC
Return Intention	1.72	3.30	3.59	A, BC	1.91	3.54	3.05	A, B, C

\*  $p < .01$

<sup>a</sup> A= 1-2 star hotels; B= 3 star hotels; C= 4-5 star hotels. The hotel groups with a significant mean difference were separated by a comma; those without a significant mean difference were not.

<sup>b</sup> A= hotel room rates <\$150; B= hotel room rates between \$150 and \$300; C= hotel room rates >\$300. The grouping was done in the same way as in the star rating case.

When the same method was applied to hotel groups by room rate (i.e., room rates less than \$150; room rates between \$150 and \$300; room rates greater than \$300), all three hotel groups showed significantly different mean scores in *value* perceptions and *return intentions*. Interestingly, the hotels with room rates between \$150 and \$300 exhibited higher mean scores in these two variables than the hotels with room rates greater than \$300. This means that, in general, guests experienced higher value perceptions with hotels charging between \$150 and \$300 than with hotels priced greater than \$300. Although the current correlation data do not permit strong causal inferences, such a difference in value perception seemed to have contributed to the corresponding difference in return intention.

## Discussion and Implications

As an exploratory study, this study reviewed one of numerous hotel review Web sites available on the Internet to determine key satisfiers (compliments) and dissatisfiers (complaints) in light of level of star ratings, room rates, and the popularity index. Based on the popularity index, hotels ranked in the top 10 were likely to be establishments rated at least a 3 star or above level, while hotels ranked in the bottom 10 tended to have either 1 or 2 star ratings. In particular, guests' evaluations of hotel performance on the seven performance attributes were much lower for 1 or 2 star rated hotels than for

3, 4, and 5 star hotels, which implied that most full, upscale, and luxury hotels performed indeed better than lower rated hotels. This result partially indicates that the widely adopted hotel rating system by stars seems to have empirical validity.

Findings of this study provide hotel management with a chance to understand what makes their guests (un)happy and (dis)satisfied and point to major directions for improvement in its offerings. First, to help guests be satisfied with their stay, hotels in 4- and 5-star ratings need to differentiate their offerings from those of lower star accommodations by assuring provision of more personalized and stylish employee services beyond high quality rooms and other basic functional services. Lower rated hotels in 1- and 2-star ratings need develop slightly different management approaches to make their guests happy and satisfied. Guests in these lower segments tend to require a good functionality of accommodation including clean, comfortable rooms, friendly employee service, and neat facilities. Thus, regardless of the star rating of the hotel, it is clear that guests expect all hotels to provide quality offerings in basic functional areas such as rooms and their cleanliness and friendly employee services. Other added services at upper end hotels should be viewed as rather “perks” that appeal to particular market segments. Also, that guests expect hotels in lower star ratings to provide correspondingly lower levels of offerings is not true, given the results of this study. High quality in basic products and services is a norm regardless of the hotel’s rating class.

Hotel management is advised to consider regularly visiting hotel review sites such as TripAdvisor.com to glean industry-wide trends in guest voices. By listening to customers’ voluntary voices about their hotel experience in general, managers have an excellent opportunity to review and re-evaluate their operational strategies and management goals against industry norms and performance average. Findings of this study indicate that there still exist sizable gaps between guest expectations and hotel offerings, especially when the hotel offerings were classified by level of service and room rates charged. Finally, such hotel review sites seem to provide valuable market information that are not directed by researchers, but freely volunteered by guests, thereby offering a raw opportunity to read industry performance trends as well as benchmark a hotel against the industry in general.

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## Employee Willingness to Relocate: A Tale of Two Models

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### Abstract

Employee willingness to relocate for the firm is especially important to multi-unit service organizations such as hotels. Previous relocation research has primarily used the Theory of Reasoned Action (TRA) as its theoretical basis. This research compared two models of willingness to relocate and its antecedents, one based on the Theory of Reasoned Action (TRA) and one based on the Theory of Planned Behavior (TPB). The results indicate that the TPB-based model was both more comprehensive in its explanatory value and more parsimonious. Theoretical and practical implications for the use of the latter model are discussed.

Key Words: Willingness to relocate, Theory of Planned Behavior.

### Introduction

Intra-organizational mobility is vital for both organizational development and career development (Anderson, Milkovich, & Tsui, 1981). An important element of intra-organizational mobility, particularly for those organizations that are geographically diverse, is the willingness of managerial and executive employees to move to new communities for job opportunities (intra-organizational relocation). Due to its decentralized nature, intra-organizational relocation is arguably more important for the service sector. Service organizations must have a decentralized service delivery network because of their inherent need to have close proximity to consumers. The obvious result is a need for managerial talent at each service location spread throughout a diffused network.

Brett and Reilly (1988) utilized Fishbein and Ajzen's Attitude Theory (1975) to empirically demonstrate that attitudes and beliefs predict intentions (i.e., willingness to relocate or WTR), and that intentions, in turn, predict behavior (i.e., acceptance of a job transfer). Subsequent relocation research has successfully continued this theoretical basis (e.g., Brett, Stroh, & Reilly, 1993), with recent researchers (e.g., Eby & Russell, 2000, Prehar, 2001) utilizing Attitude Theory's successor, the Theory of Reasoned Action or TRA (Ajzen & Fishbein, 1980) to predict WTR.

While relocation researchers have utilized Attitude Theory and TRA as their theoretical basis, they have also included other variables external to TRA (e.g., ambition and organizational commitment) to attempt to improve the predictive ability of their models (e.g., Brett et al., 1993; Eby & Russell, 2000). A relevant variable that has heretofore escaped the interest of relocation researchers is obligation to relocate. Robinson, Kraatz, and Rousseau (1994) investigated the types of commitments that organizations sought from potential managerial employees during the recruitment process. They found that one of the transactional commitments sought and received by employers was willingness to relocate for the organization. Related, anecdotal evidence (Kennedy, 1999) suggests that some multi-unit hotel companies have an explicit expectation that a new hire must be willing to relocate to another community upon hire or after some period of initial training. This gap in the relocation literature provides a significant research opportunity and was a major factor in motivating the present research. Related, because I did not want to continue the ad-hoc process of appending variables to a TRA-based model, I used an extension of TRA known as the Theory of Planned Behavior or TPB (Ajzen, 1991) that would accommodate the new variable of interest, obligation to relocate, and used this as my underlying theoretical framework. In order to compare the efficacy of this new model, I also tested an alternative model of WTR. While there have been more recent investigations (e.g., Eby & Russell, 2000), I chose Brett et al.'s (1993) model for comparison because it is still considered to be the most comprehensive test of WTR in the relocation literature.

Hence, this research has three primary objectives: First, to test a new variable of interest, obligation to relocate, as an antecedent to WTR; second, to test a new model of WTR based on TPB, which is derived from TRA, but which has evolved independently of relocation research; and third, to compare this TPB-based model to Brett et al.'s (1993) model of WTR to determine which model has greater explanatory value.

### Literature Review

Fishbein and Ajzen's (1975) developed an attitude-based theory that predicted that beliefs and attitudes combine to predict behavioral intentions. In turn, behavioral intentions predict actual behavior. This is the theory that serves as the theoretical basis for a number of WTR studies including Brett and Reilly (1988) and Brett et al. (1993). In this context, the behavioral intention (BI) is WTR. This theory (Fishbein & Ajzen, 1975) was subsequently refined and labeled the Theory of Reasoned Action or TRA (Fishbein, 1980). TRA has been used as the basis for a number of WTR studies including Eby & Russell (2000) and Prehar (2001). TRA has proven to be quite a robust theory and has been widely applied across a

number of research settings (Gentry & Calantone, 2002). TRA has a number of practical applications because it assumes that BI is exclusively influenced by attitudes (A) and social norms (SN), and that any other factors that influence BI must do so indirectly through A or SN (Davis, Bagozzi, & Warshaw, 1989).

Ajzen (1991) subsequently developed the Theory of Planned Behavior (TPB) in response to criticisms that TRA did not adequately take into consideration the volitional control of the person over the behavior in question. TPB postulates that BI is determined by attitudes towards the behavior (A), subjective norms towards the behavior (SN), and perceived behavioral control (PBC) over the behavior. The constructs of A and SN are identical to those included in TRA. PBC refers to the ease or difficulty that the person has over the given behavior, and is expected to vary across actions and situations. TPB has subsequently been extended to include perceived moral obligation or PMO (Raats, Shepherd, & Sparks, 1995). PMO refers to the individual's perception of a prior agreement or moral imperative to comply with the behavior in question. Similar to previous derivations of this theory, all key constructs of Extended TPB or Extended TPB (A, SN, PBC, and PMO) independently combine to determine BI, and all other factors that influence BI do so indirectly through these four key constructs.

Consistent with prior relocation research, this study include a number of control variables: age, gender, marital status, income, job function, and community tenure. Extended TPB is a particularly appropriate theory to use when testing a model of WTR because PMO explicitly accounts for the variable of interest that has been previously omitted from WTR research, obligation to relocate. Moreover, Extended TPB is a very parsimonious theory, with only four key constructs, excluding relevant control variables.

While a number of relocation researchers (e.g., Brett and Reilly, 1988; Lawson & Angle, 1994; Eby & Russell, 2000; Prehar, 2001) have investigated WTR and its antecedents, the most comprehensive published study to-date was by Brett et al. (1993). They surveyed 827 employees from 20 Fortune 500 companies who had moved at least once for their current employer in the two years prior to the study. They investigated five sets of variables that influenced WTR: demographic characteristics (gender, race, marital status, number of children at home, spouse employment status, age, and education), career characteristics (number of prior relocations in their career, company tenure, job tenure, income, job level, number of career labor force exits, and job function), work attitudes (job involvement, job satisfaction with wages, intrinsic job satisfaction, and company loyalty), career attitudes and expectations (ambition, perceptions of future career opportunities with the organization, and attitudes toward moving), and spouse attitudes toward relocation (spouse attitudes toward moving and spouse willingness to relocate).

The results of their study were illuminating. Of the demographic characteristics, only age was a significant predictor of WTR; younger managers were more likely to be willing to relocate. Among the career characteristics, only income and job function were significant predictors; lower wage earners were more willing to relocate, while sales/marketing types were more likely to want to move. None of the work attitudes were significant (i.e., job involvement, job satisfaction, or organizational loyalty). All of the career attitudes/ expectations were significantly related to WTR; employees who were ambitious, saw future opportunities with the organization, and who had positive attitudes toward moving were more likely to be WTR. Of the spousal attitudes toward relocation, spouse attitudes toward moving were not significant, but spouse WTR was the most significant predictor of employee's WTR among those who were married. This last finding may have been Brett et al.'s (1993) most significant. In a previous study (Brett & Reilly, 1988) spouse willingness to relocate did not have an independent effect on employee's WTR. Brett et al. (1993) concluded that the results of the second study indicated that spouses had more of an impact on relocation decisions than in the past.

Two models of the antecedents of WTR were tested in this research. First, the Brett et al. (1993) study was replicated as a baseline for comparative purposes. All variables were measured similarly, with a few exceptions that will be discussed in the Method section. Then, an alternative model was tested using Extended TPB as the theoretical basis.

## **Method**

### *Setting, Subjects, and Procedure*

The data described in this paper were collected as part of a larger research project on intra-organizational relocation. Surveys were administered to managers and executives in Australia and New Zealand employed by an Asia-Pacific hotel chain. Surveys were sent to 39 hotels in the two countries. Surveys were mailed to the hotel human resource managers who delivered them to all managerial staff. Thirty-eight of the 39 hotels returned surveys. Of 535 surveys distributed, 462 were returned for an 86% response rate. This resulted in 449 useable surveys, for an 84% effective response rate.

All employee questionnaires included a spouse/partner questionnaire which was coded to enable matching with the focal employee questionnaire upon return. The spouse/partner survey was utilized to collect pertinent relocation data

directly from the spouses/partners of the employees. All questionnaires included a covering letter from the organization's CEO encouraging them to fill out the questionnaire while they were at work. Participation was voluntary and confidentiality was assured.

As this paper focuses solely on the behavioral intention, WTR, and its antecedents, only those variables and cases pertinent to the present investigation will be discussed herein. The pertinent cases constitute a sample of 303 married or cohabiting employees whose spouses/partners returned matching questionnaires.

The average age of the employee respondents in this sample was 34. Average annual income in constant dollars is AU\$58,140. Average job level was 5. The range of job levels of employees responding to the survey was from level 2 (CEO = job level 1) to level 7 (6 levels below the CEO), with the hotel general manager = job level 3. Seventy-four percent of the respondents were married. By definition, all respondents were cohabiting with a spouse or a partner. The average number of children in each respondent household was .67. Eighty-six percent of the respondents had spouses or partners who were working at least part-time outside of the home. Fifty-eight percent of the respondents were female. Average tenure with the organization was 3.5 years, while average community tenure was 7.7 years.

#### *Measures used in Model 1*

The following section details the measures that were used to test the first model. The 22 independent variables and 1 dependent variable tested by Brett et al. (1993) were replicated in Model 1. All variables were measured similarly to Brett et al. (1993), with three exceptions. First, while Brett et al. (1993) measured job satisfaction with wages and intrinsic job satisfaction, I measured global job satisfaction. Second, given Brett's (1992) suggestion that organizational commitment might be a better measure of attachment than organizational loyalty, I used the broader construct of organizational commitment rather than organizational loyalty. Third, as will be discussed in more detail shortly, for psychometric reasons, I replaced Brett et al's (1993) single-item measure of WTR with a multi-item measure.

Willingness to relocate has been typically measured with a single-item measure (Brett & Reilly, 1988; Brett et al., 1993). Since an internal reliability coefficient cannot be calculated for a 1-item measure, a psychometrically sound four-item measure of WTR was developed. A typical item is "I would describe my overall willingness to move to another community as high", answered on a 5-point Lickert-type scale ranging from 1 = strongly disagree to 5 = strongly agree. In order to insure that the measure captured the intention of interest (i.e. intra-organizational domestic willingness to relocate), included in the instructions was the phrase "Please answer the following questions about how you feel about a future geographic move with 'name of organization' within the country that you currently live in." The internal reliability coefficient of this four-item measure of WTR was very acceptable ( $\alpha = .94$ ).

The following demographic characteristics were assessed through specific questions on the focal employee questionnaire: gender, race, marital status, number of children at home, spousal/partner employment status, age, and education. Consistent with Brett et al. (1993), the following career attributes were assessed through specific questions on the focal employee questionnaire: number of prior relocations, organizational tenure, job tenure, annual income, job level, number of career labor force exits, and job function.

Job involvement was measured using three items (e.g. "The most important things that happen to me during the week involve my work") adapted from Hackman and Lawler (1971). The internal reliability coefficient for this 3-item scale was  $\alpha = .72$ . Job satisfaction was measured with a three-item scale used successfully in past research (e.g., Judge, Boudreau, & Bretz, 1994). The internal reliability coefficient of this standardized scale was  $\alpha = .78$ . Organizational commitment was measured with the 12-item scale developed by O'Reilly and Chatman (1986). The internal reliability coefficient of this measure in this study was acceptable with  $\alpha = .75$ . Two items measuring extrinsic ambition were used for the ambition measure. An example item is "How many jobs are still required to reach your promotion goal?". The internal reliability coefficient was acceptable with  $\alpha = .70$ . Career expectations was measured by a two-item scale adapted from a four-item scale developed by Brett et al. (1993). An example of an item is "My future career with 'name of organization' looks bright." The internal reliability coefficient for this scale was acceptable with  $\alpha = .75$ . Employee attitudes toward moving were measured with seven items taken from a 10-item scale developed by Brett and Reilly (1988). The scale includes items such as "Moving hurts children's social development," answered on a 5-point Lickert-type scale ranging from 1 = strongly disagree to 5 = strongly agree. The internal reliability coefficient was acceptable with  $\alpha = .70$ .

Spouse/partner attitudes toward moving was measured with seven items adapted from employee attitudes toward moving (above). The internal reliability coefficient for this scale was acceptable with  $\alpha = .70$ . The aforementioned four-item scale of employee willingness to relocate (WTR) was adapted for use as the four-item scale of spouse/ partner WTR. The internal reliability coefficient for this scale was very acceptable ( $\alpha = .93$ ).

### *Measures used in Model 2*

The measures that were used specifically for the model based on Extended TPB are described below. A number of previously described measures (e.g., age, gender, marital status, income, job function, and attitudes towards moving) were utilized in both models. While Brett et al. (1993) did not test community tenure in their model, because a number of researchers (e.g., Noe et al., 1988) found it to be negatively related to WTR, I included it as a control variable. It was assessed through a specific question on the focal employee questionnaire.

Two items were developed to measure subjective norm (SN) to move. An example is “Generally speaking, managers with ‘name of organization’ are expected to accept relocation offers”. The internal reliability coefficient for this scale was acceptable ( $\alpha = .71$ ). Three items were developed to measure perceived behavioral control over moving (PBC). An example is “I have a great deal of personal control over whether or not I would relocate”. The internal reliability coefficient for this scale was acceptable ( $\alpha = .73$ ). Perceived moral obligation to move (PMO) on the part of the employee was measured by two items adapted from work done by Robinson et al. (1994). An example is “To what extent does your commitment to your employer include willingness to accept a job relocation?” answered on a five-point scale from 1 = not at all to 5 = very much. The alpha coefficient for this scale was acceptable with  $\alpha = .70$ .

### *Analyses*

Multiple regression analysis was utilized to estimate the effect of each individual independent variable on the dependent variable, WTR. The significance of each individual regression coefficient informs us as to whether or not that variable is a statistically significant predictor of the dependent variable (Pedhazur, 1982). Multiple regression analysis is an appropriate analytical tool in this instance because it can determine both the path coefficients (betas) as well as total model variance ( $R^2$ ), which is an indicator of the overall explanatory value of the model.

This was supplemented with hierarchical multiple regression analysis, which was used to analyze the impact of the various sets of variables on the dependent variable, WTR. Given 6 sets of variables in Model 1 and 5 sets in Model 2, it is important to determine if each set of variables accounts for unique variance in WTR. Darlington (1968) recommends usefulness analysis for this purpose. In this procedure the full model is calculated first, then a second model that includes all of the variables except the set of variables (or the individual variable) of interest is calculated. The difference in the variance accounted for between the full and reduced model is the unique variance accounted for by that set of variables or the “usefulness” of that category of variables in accounting for variation in the dependent variable. The calculation of the unique variance is not affected by the order of entry of the variables into the model (Pedhazur, 1982). Hierarchical multiple regression analysis was chosen as the analytical method because of its compatibility with multiple regression analysis as well as the ease with which the variance for each set of variables can be calculated.

### **Results**

The table of means (M), standard deviations (SD), and intercorrelations of the study variables was omitted from this publication for space reasons, but is available from the author. Of the 22 independent variables utilized in Model 1, 9 had highly significant positive correlations ( $p \leq .01$ ) with the dependent variable, WTR. These variables were education level, number of prior relocations, job involvement, organizational commitment, ambition, career expectations, employee attitudes toward moving, spouse/partner attitudes toward moving, and spouse/partner willingness to relocate. Spouse/partner WTR had the highest positive correlation with WTR ( $r = .54, p \leq .01$ ). Highly significant negative correlations ( $p \leq .01$ ) included gender, job tenure, and community tenure. Of the 12 independent variables utilized in Model 2, 8 variables were shared by both models, with only 4 independent variables (SN, PBC, PMO, and community tenure) exclusive to Model 2. Of these, 2 (PBC and PMO) had highly significant positive correlations ( $p \leq .01$ ) with the dependent variable, WTR, with PMO having the highest positive correlation with WTR of all variables ( $r = .83, p \leq .01$ ), regardless of model.

#### *Model 1.*

The table illustrating the results of the multiple regression analyses for Model 1 was omitted from this publication for space reasons, but is available from the author. The dependent variable, WTR, was regressed on the 22 independent variables. Significant betas indicate that the variable is a statistically significant predictor of WTR. If the unique  $R^2$  is significant, this indicates that the set of variables accounts for unique variance in the overall model.

Of the 7 demographic variables, only marital status had a statistically significant beta ( $\beta = -.10, p \leq .01$ ); single employees were more likely to consider themselves to be mobile. Of the 7 career attributes, only number of prior relocations was a statistically significant predictor of WTR ( $\beta = .14, p \leq .01$ ). The more frequently that an employee had relocated in the past, the more likely they were to think of themselves as willing to move again. Organizational commitment was the only work attitude that was a significant predictor of WTR ( $\beta = .13, p \leq .01$ ). While organizational loyalty was tested by Brett et al. (1993) and not found to be a significant predictor, the substitution of organizational commitment for organizational loyalty was substantiated. Consistent with Brett et al. (1993), analysis of the career attitudes

and expectations variables revealed that ambition ( $\beta=.18, p\leq.01$ ) and employee attitudes toward moving were significant predictors ( $\beta=.27, p\leq.01$ ). Managers and executives with higher ambition and positive attitudes toward moving were more inclined to see themselves as willing to relocate. Of the spousal/partner predictors, spouse/partner WTR was the strongest predictor of WTR ( $\beta=.31, p\leq.01$ ). Consistent with Brett et al. (1993) and Eby and Russell (2000), the willingness of the spouse to characterize him/herself as WTR is a major determinant of the focal employee's WTR.

Relative to sets of variables, all six sets contributed to the unique variance of the regression equation in Model 1. Spouse/partner attitudes accounted for the largest percentage of the unique variance (8.9%). This was driven by the strength of the variable spouse/partner WTR. Attitudes towards work accounted for the smallest percentage of the unique variance, contributing only 1.6% of unique variance in WTR. In total, the 22 independent variables accounted for 54.3% ( $R^2=.543, p\leq.01$ ; Adj  $R^2=.507, p\leq.01$ ) of the variance in the dependent variable. This compares very favorably with the results of the Brett et al. (1993) study (Adj  $R^2=.24, p\leq.01$ ).

#### Model 2.

The table illustrating the results of the multiple regression analyses for Model 2 was omitted from this publication for space reasons, but is available from the author. The dependent variable, WTR, was regressed on the 10 independent variables specified in the Extended TPB Model.

Of the 6 control variables included in this model, only income had a statistically significant beta ( $\beta=-.10, p\leq.01$ ). Employees with lower incomes were, on average, more likely to characterize themselves as willing to relocate relative to more highly compensated employees. Attitudes towards moving was only a marginally significant positive predictor of WTR in Model 2 ( $\beta=.07, p\leq.10$ ). SN was also only marginally significant, albeit in a negative direction ( $\beta=-.06, p\leq.10$ ). PBC was a highly significant predictor ( $\beta=.14, p\leq.01$ ) of WTR. Employees who perceived that the decision to move was largely up to them and not to others were more likely to see themselves as mobile. PMO was the largest single predictor of WTR ( $\beta=.69, p\leq.01$ ). Employees who felt that they had an organizational obligation to consider relocations were most likely to characterize themselves as WTR.

Relative to sets of variables, only 3 of the 5 sets contributed to the unique variance of the regression equation in Model 2. PMO accounted for the largest percentage of the unique variance (24.4 %). The control variables accounted for the next largest percentage of unique variance (1.6%). This was largely driven by the strength of the income measure in this set of variables. PBC accounted for the smallest percentage of the unique variance, contributing only 1.3% of unique variance to WTR. Attitudes towards moving (A) and subjective norm (SN), while marginally significant predictors, did not contribute any unique variance to the dependent variable. In total, the 10 independent variables accounted for 72.6% ( $R^2=.726, p\leq.01$ ) of the variance in the dependent variable in Model 2. Relative to an  $R^2=.543 (p\leq.01)$  for Model 1, this is an increase in  $R^2$  of .183 or 18.3 percentage points. With a smaller set of explanatory variables (10 vs. 22), Model 2 accounts for a far greater percentage of the variance in the dependent variable.

#### Discussion

The results suggest that while the Brett et al. (1993) model of WTR is still an effective predictive model, Model 2 is more effective for a number of reasons. First, the latter model easily accommodates obligation to relocate, which is not only a newly introduced antecedent to WTR, but is surprisingly the most significant predictor in this study. Second, Model 2 is more comprehensive in that it accounts for more variance in the dependent variable. Third, because the latter model uses only four key constructs plus control variables to predict WTR, the model is far more parsimonious than Model 1. This allows researchers to bypass a number of work and career attitudes and attributes that are not of direct theoretical relevance when using Extended TPB. Finally, all four key Extended TPB variables were at least marginally significant predictors (i.e., A and SN were marginally significant, while PBC and PMO were highly significant), demonstrating that all key variables in Model 2 may have some role to play in the prediction of WTR. The addition of obligation to relocate as a determinant of WTR, and the use of Extended TPB as the underlying theory, were clearly justified.

The future application of Model 2 has a number of theoretical as well as practical advantages. From a theoretical perspective, the use of Extended TPB will allow future WTR researchers to stay closer to a singular theoretical base, rather than to add explanatory variables on an ad-hoc basis. From an empirical perspective, the identification of a model that is both more comprehensive and parsimonious is an important addition to the literature. From a practical perspective, not only does Model 2 use fewer variables (10 vs. 22) to account for more variance, there are far fewer items in Model 2 than in Model 1 (20 items vs. 54 items). For human resources practitioners, the completion of a 20-item employee questionnaire will be far less time consuming and less expensive than a 54-item questionnaire. Related, Model 2 does not require the surveying of an employee's spouse or partner. From a practitioner's perspective, not only does this further reduce time and dollar costs, there is less intrusion into the employee's personal life.

The omission of a separate spouse/partner questionnaire is sure to be controversial to many relocation researchers. For some time, the empirical results have consistently shown that spouse/partner WTR (typically collected via a separate

spouse/partner questionnaire) is one of the most important predictors of employee WTR (Brett et al., 1993; Eby & Russell, 2000; Prehar, 2001). Model 2 does not include this measure, yet it accounts for more variance. Moreover, if this research can be consistently replicated, PMO may displace spouse/partner WTR as the single most important predictor of employee WTR. One of the reasons that Model 2 may be such a good predictor of WTR without testing for spouse/partner WTR is that PMO (from Model 2) and spouse/partner WTR (from Model 1) are highly correlated ( $r=.53, p\leq.01$ ). Recall from Model 1 that spouse/partner WTR and WTR are also highly correlated ( $r=.54, p\leq.01$ ). Apparently, cohabiting couples share common views on their willingness to relocate, and this may be due, in large part, to a shared understanding of the obligations that the focal employee has with the employing organization.

### Limitations and Contributions

While this study has attempted to move the relocation literature forward by utilizing more recent theory, there are limitations that must be considered. Because demographic variables often are posited to influence WTR, the demographic composition of our sample may not be representative of other groups of individuals contemplating their relocation intentions, and this may limit the external validity of the findings. Specifically, the average age ( $M=35$ ) and gender representation (58% female) may be somewhat unrepresentative of most employees facing relocation decisions. On the other hand, other relocation research has studied workers similar in age (Brett, Stroh, & Reilly, 1993; Eby & DeMatteo, 2000) and gender (Bielby & Bielby, 1992) to the participants in this study. Future research should study groups of individuals with different demographic make-ups. My results also may not generalize to other nations or industries. It is true that, though the results are international (from two nations), and therefore may have greater global generalizability than most prior domestic intra-organizational WTR research (i.e., most within same country intra-organizational WTR work has been conducted in the USA), this researcher did not comprehensively sample individuals from many different countries. Similarly, because the results are restricted to the hotel industry, they may not generalize to other non-hotel or non-service industries.

These limitations are juxtaposed against a number of strengths and contributions. This is the first study to effectively use Extended TPB as a basis to study WTR, and makes a contribution by virtue of being more a more comprehensive and parsimonious model. Related, the finding that PMO is the most significant predictor of WTR is a very important addition to the literature, particularly if this finding can be replicated. Practitioners will be interested in learning of another key measure that they can use to analyze and diagnose their employees' proclivity to consider relocations. Finally, by using actual managers, the sample is prototypic (Martocchio & Judge, 1994) and participants are more likely to act in-role. Because the sample was drawn from a large multi-unit, multi-country hotel company, the participants should be reasonably representative of the management of large hotel organizations subject to intra-organizational transfers within the same country.

### Implications and Future Research

These results highlight the importance of keeping abreast of changes in underlying theory that evolves separately from the empirical research in a given literature. Evidently, the evolution of the theory of TRA into TPB, and then into Extended TPB, may be an important aid in the understanding of WTR and its antecedents. Related, the changing importance of psychological contracts as illuminated by Robinson et al. (1994) may warrant greater attention by future relocation researchers.

Future research should attempt to replicate and extend the findings tested in Model 2. Until that is done, researchers should continue to empirically test Model 2 (or a similar model) against the Brett et al. (1993) model or similar model. Finally, future relocation research should utilize Extended TPB theory to test the link between the behavioral intention (WTR) and actual behavior (i.e., the relocation decision). There has only been one study (Brett & Reilly, 1988) that has successfully tested a relationship between WTR and the relocation decision, and an updated test of this relationship is a major opportunity for researchers. Moreover, TPB theory posits that PBC has a direct effect on both the behavioral intention variable (i.e., WTR) and on the behavior itself (i.e., the relocation decision). The testing of the relationship between PBC and the relocation decision has never been done, so this presents another important research opportunity.

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## Hospitality Firms Derivates Uses and Cash Flow/Earnings Volatility

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### Abstract

Firms utilize financial derivative instruments to manage risks. Smoothing cash flows and earnings are important aspect of current financial risks management. This study investigated the use of financial derivatives in the lodging, hotel real estate investment trusts (REITs), and casino industry. The data for the study were collected from both Compustat database and firms' Form 10-K filings with the Securities and Exchange Commission (SEC). The findings of the study verify that there are significant differences between financial derivatives users and non-users in terms of financial characteristics, cash flow volatility, and earnings volatility.

**Key Words:** risk management, hedging, derivatives, lodging, casino, REITs.

### Introduction

A firm's risk management strategy is a crucial part of its overall business strategy (Shuldiner and Norkus, 1996). Morgan and Rao (2000) argued that marketing, operations, and financial risks are three critical axis of a service company's risk management. Financial risk management focuses on creating firm value by using various financial instruments to manage a firm's risk exposure. Financial derivatives such as interest rate, currency, and commodities could be one way of managing a firm's risks (Guay and Kothari, 2003) and they are commonly used for financial risk management due to their ability to counterbalance specific risks of a firm. According to the International Monetary Fund (IMF), "financial derivatives are financial instruments that are linked to a specific financial instrument or indicator or commodity, and through which specific financial risks can be traded in financial markets in their own right (IMF, 2005)." The name, derivatives, originates from the fact that the value is derived from the value of other assets such as commodities and securities. Today's managers are under pressure to report smooth cash flows and earnings. In fact, investors negatively value both cash flow volatility and earnings volatility. Hospitality-related industry is well known as a capital-intensive industry. Indeed, the industry is capital intensive in nature having long gestation periods, which not only has a bearing on the cash flows but also affects the return on investment (ROI) for a period of time. In particular, the industry highly depends on long-term debt (Andrew & Schmidgall, 1993), which causes financial distress on hospitality managers. Consequently, by using financial derivatives, they could hedge risk involved in floating interest rates, because interest rate swaps enable them to fix interest rates they will pay. Despite the potential usefulness of utilizing financial derivatives for the industry, to our knowledge, little research has been conducted to investigate the use of financial derivatives in the lodging industry. Therefore, this study is designed to explore the hospitality firms' financial derivatives usages.

### Literature Review

Due to the usefulness of derivative financial instruments in hedging risks, there has been a dramatic increase in derivatives market over the last 15 years (Raturi, 2005). Although financial derivatives are useful in managing a firm's risks, there is a scarcity of research concerning financial derivatives in the field of hospitality. In an earlier study, Shuldiner and Norkus (1996) explained how commodity hedging works in futures market with an example. However, to the best of our knowledge, there is no empirical research regarding hospitality firms' derivatives uses. On the other hand, empirical studies have been conducted in other areas. A descriptive approach has been adopted by several researchers to illustrate the use of financial derivatives by firms. Bodnar, Hayt, and Marston (1996) reported on US non-financial firms' derivatives usage. According to the authors, larger firms were more actively using derivatives than were smaller firms, and they reported that managing cash flows (49%) and earnings (42%) were dominant reasons why US non-financial firms utilized financial derivatives. On the contrary, insignificant risk exposure, negative impact on the cost-benefit relationship, and lack of knowledge were major reasons why firms did not use financial derivatives. Further, some researchers adopted an international perspective and compared the use of financial derivatives by firms in different countries. For example, Jalilvand, Switzer, and Tang (2000) compared the use of derivatives among Canadian, US, and European risk managers. Researchers have also shown interest in the reasons why firms use financial derivatives. Froot, Scharfstein, and Stein (1993) documented that firms had an incentive to hedge in order to reduce dependence on external capital. After examining the use of currency derivatives by Fortune 500 firms, Geczy, Minton, and Schrand (1997) reported that firms with greater growth opportunities and tighter financial constraints were more likely to use currency derivatives in order to reduce cash

flow variation. In addition, Allayannis and Weston (2001) found that the use of foreign currency derivatives caused an increase in firm value. Further, Nelson, Moffitt, and Affleck-Graves (2005) investigated the impact of hedging on the market value of equity. They found that hedgers outperformed non-hedgers in terms of annual stock performance. However, they explained that this over-performance was entirely a characteristic found in larger firms that hedge currency.

There are several studies comparing financial derivatives users to non-users. Berkman and Bradbury (1996) investigated use of financial derivatives by New Zealand corporations and found that corporate derivative use increased with leverage, size, the existence of tax losses, the proportion of shares held by directors, and the payout ratio and decreased with interest coverage and liquidity. Raturi (2005) also investigated differences between derivatives users and non-users with insurance companies using both primary and secondary data and concluded that derivatives are used by larger companies due to economies of scale and are not commonly used by small firms due to unfamiliarity with derivatives. There is another stream of research which focuses on the relationship between the use of derivative instruments and a firm's risk exposures such as cash flow volatility and earnings volatility. Even though studies in this line of research still report differences between derivatives users and non-users, their focuses are beyond detecting differences between the two groups. Deshmukh and Vogt (2005) showed that firms used financial derivatives to reduce cash flow volatility. In addition, Barton (2001) documented that firms used derivatives to maintain a desired level of cash flow volatility and earnings volatility. In addition, Petersen and Thiagarajan (2000) explored differences in risk exposures between a derivatives user and a non-user and concluded that a firm's risk management strategy should be determined by its risk management objective although financial derivatives are useful in managing risks.

The primary purpose of this study is twofold. First, this study investigates if there are any differences between financial derivatives users and non-users in terms of financial characteristics (i.e., total assets, net sales, market value of equity, leverage, times interest earned ratio, and return of assets). In addition, this study tests if there are any significant differences between financial derivatives users and non-users in terms of cash flow volatility and earnings volatility. Based on the purpose of the study, two research hypotheses are established.

Hypothesis 1: There are significant differences between financial derivatives users and non-users in terms of financial characteristics.

Hypothesis 2: There are significant differences between financial derivatives users and non-users in terms of cash flow volatility and earnings volatility.

There is lack of knowledge and research about the use of derivatives by hospitality firms. This study has value in that it is the first empirical study regarding hospitality firms' derivative usages and that it tests if financial derivatives are useful in mitigating hospitality firms' cash flow volatility and earnings volatility with recent data. The findings of this study would be useful to financial managers in hospitality firms in deciding their risk management strategies.

## **Methodology**

The sample for this study includes lodging, hotel Real Estate Investment Trusts (REITs), and casino firms and includes both firms that use financial derivatives and firms that do not. First, publicly traded lodging, hotel REITs, and casino firms in the Compustat database were selected. Financial information such as total assets, cash flows, and earnings per share of the firms was also gathered from the Compustat database for the time period, years 2000 to 2004. Further, information regarding firms' derivatives uses was hand-gathered from firms' annual 10-K filings retrieved from the SEC's Edgar database. Firms lacking the annual 10-K report for any year between 2000 and 2004 were dropped from the data sample since information about the particular firms' derivatives uses was insufficient to complete the study. This elimination procedure resulted in 235 firm-year observations from 47 firms (14 lodging firms, 12 hotel REIT firms, and 21 casino firms) for the years 2000 to 2004. This study incorporates financial characteristics of firms including total assets (log of total assets), net sales (log of net sales), market value of equity (log of market value of equity), leverage (total debt/total assets), long-term debt ratio (long-term debt/total assets), times interest earned ratio (earnings before interest and taxes/interest expense), return on assets (ROA), operating cash flow, earnings per share, and income before extraordinary items. Annual figures of the aforementioned financial characteristics were gathered from the Compustat database. Additionally, firms' cash flow volatility and earnings volatility were calculated based on quarterly data from Compustat database. Volatility is measured as the coefficient of variation over the 20 quarters in the five-year period. The coefficient of variation for operating cash flow is the standard deviation of operating cash flow divided by the absolute value of the mean of operating cash flow over the same period. Likewise, the coefficient of variation for earnings per share (income before extraordinary items) is the standard deviation of earnings per share (income before extraordinary items) divided by the absolute value of the mean of earnings per share (income before extraordinary items) over the 20 quarters. In order to test differences in financial characteristics between financial derivatives users and non-users, independent sample t-tests are

utilized. Further, given the limited sample size, Mann-Whitney U-tests (non-parametric statistical analyses) were employed to examine differences in cash flow volatility and earnings volatility between financial derivatives users and non-users.

## Findings

Firms in the pooled sample have a mean value of assets of \$2,029.24 million (median of \$765.16 million), a mean net sales of \$978.41 million (median of \$279.27 million), and a mean market value of equity of \$1,190.30 million (median of \$259.87 million). The mean (medians) of leverage (total debt/total assets) and long-term debt ratio (long-term debt/total assets) are .51 (.51) and .46 (.49) respectively. The mean (median) of times interest earned ratio is 1.90 (1.58). In addition, the means (medians) of operating cash flow and income before extraordinary items are \$137.12 million (\$40.69 million) and \$34.46 million (\$4.88 million) respectively. The average ROA is -.14 and the average earnings per share is -\$4.18, indicating that the hospitality firms suffered from the economic slowdown over the sample period. More than half (55%) of the sample did utilize financial derivatives and larger firms are more likely to use derivatives, as reported in the previous studies. Interest rate was the most popular item that hospitality firms hedge using financial derivatives instruments. In terms of type of instrument, it was found that hospitality firms used swaps most frequently, followed by forwards. In fact, it was found that all the derivatives users (26 firms) hedged their interest rate using swaps. Further, hospitality firms preferred forward contracts when they hedged risks involved in foreign currencies. Firms in the pooled sample have a mean operating cash flow volatility of .86 (median of .69), a mean earnings per share volatility of 2.69 (median of 1.38), and a mean income before extraordinary items volatility of 3.22 (median of 1.77). Lodging companies have a mean operating cash flow volatility of .94 (median of .74), a mean earnings per share volatility of 2.43 (median of 1.55), and a mean income before extraordinary items volatility of 2.75 (median of 1.43). REITs firms have a mean operating cash flow volatility of .79 (median of .73), a mean earnings per share volatility of 3.16 (median of 2.30), and a mean income before extraordinary items volatility of 4.34 (median of 2.96). Finally, casino companies have a mean operating cash flow volatility of .84 (median of .64), a mean earnings per share volatility of 2.63 (median of 1.21), and a mean income before extraordinary items volatility of 2.91 (median of 1.23).

Consistent with the previous studies, it was found that the derivatives users are generally larger firms in terms of total assets, net sales, and market value of equity across the three industries ( $p < .01$ ). Also, ROA was found to be significantly different between derivatives users and non-users in the combined sample indicating higher ROA of derivatives users. In the pooled sample neither cash flow volatility nor earnings volatility differed at the .05 level between the two groups. There was no statistical evidence that income before extraordinary items volatility was significantly different between users and non-users at the .05 level, but the significance was marginal ( $p = .052$ ). In the lodging industry, it was found that earnings volatility (both earnings per share volatility and income before extraordinary items volatility) of derivatives users was significantly lower than that of non-users ( $p < .05$ ). In the REITs industry, derivatives users and non-users were significantly different in terms of times interest earned ratio ( $p < .05$ ). In the casino industry, long-term debt ratio ( $p < .01$ ), ROA ( $p < .01$ ), and operating cash flow volatility ( $p < .05$ ) were found to be significantly different between derivatives users and non-users indicating higher long-term debt ratio, higher ROA, and lower cash flow volatility for the derivatives users. The results are shown in Table 1.

## Discussions

Overall, the findings of the study were consistent with previous studies even though the research hypotheses were not fully supported. This study revealed that hospitality firms with larger assets, net sales, and market value of equity are more likely to use financial derivatives than small firms. In addition, earnings volatility was significantly different between derivatives users and non-users in the lodging industry, whereas cash flow volatility was significantly different between the two groups in the casino industry. However, no significant difference in cash flow volatility or earnings volatility was found in the REITs industry.

The findings of this study also showed that interest rate swap is the most popular financial derivative in the lodging, REITs, and casino companies followed by foreign currency forwards. As mentioned earlier, the hospitality industry is a capital-intensive industry and it highly relies on long-term debts. An interest rate swap is a contract between two parties to exchange a series of fixed rate and floating rate interest payments over a predefined period of time. Simply speaking, a swap is an exchange of cash flows. Hospitality firms can exchange floating interest rates for fixed interest rates (floating-for-fixed swaps) or fixed interest rates for floating interest rates (fixed-for-floating swaps). Suppose a hotel project manager undertakes a large hotel development project financed by a floating-rate loan. The manager is probably not optimistic about the future course of interest rates and is reluctant to bearing interest rate risk. Entering into an interest rate swap agreement results in the effective financing of the project. The project manager wants to lower interest rate risk exposure, and requires a financial institution which offers a floating rate to enter into a swap contract with another financial institution which is willing to offer a fixed rate by speculating that interest rates will fall. This way the floating rate is effectively converted into a fixed rate through the interest rate swap instrument.

Table 1  
Difference between Financial Derivatives Users and Non-Users

		Users			Non-users			t/z value
		Mean	Med.	Std. Dev.	Mean	Med.	Std. Dev.	
Total	Log of Assets	21.21	21.20	1.34	18.55	18.61	2.07	-11.378**
	Log of Sales	20.39	20.50	1.40	18.11	18.39	1.64	-11.238**
	Log of Market Value of Equity	20.30	20.27	1.62	17.22	17.00	2.30	-11.493**
	Total Debt/Total Assets	.51	.52	.16	.50	.45	.33	-.514
	Long-term Debt/Total Assets	.49	.50	.17	.43	.40	.33	-1.603
	Times Interest Earned Ratio	1.78	1.74	1.29	2.05	.98	12.49	.211
	Return on Assets	1.12	1.86	4.11	-1.70	.12	11.95	-2.299*
	Operating Cash Flow Volatility	.73	.66	.28	1.01	.76	.66	-1.348
	Earnings per Share Volatility	1.57	1.01	1.73	3.72	1.50	5.18	-1.729
	Income before Extraordinary Items Volatility	2.03	1.14	2.39	4.71	2.29	5.05	-1.947
Lodging	Log of Assets	21.57	21.51	1.23	18.48	18.60	2.79	-5.254**
	Log of Sales	20.70	20.06	1.39	18.29	18.32	1.57	-6.629**
	Log of Market Value of Equity	20.35	20.15	2.04	17.25	16.94	1.76	-6.385**
	Total Debt/Total Assets	.42	.44	.18	.47	.57	.34	.643
	Long-term Debt/Total Assets	.38	.41	.17	.44	.54	.33	.867
	Times Interest Earned Ratio	1.50	1.67	1.35	-.10	.87	5.18	-1.424
	Return on Assets	.05	1.91	4.74	-4.62	-.23	16.64	-1.347
	Operating Cash Flow Volatility	.88	.74	.38	1.04	.74	.81	-.067
	Earnings per Share Volatility	1.27	.97	.88	4.52	3.04	3.48	-2.200*
	Income before Extraordinary Items Volatility	1.19	.98	.65	5.54	3.06	4.79	-2.200*
REITs	Log of Assets	21.05	20.50	1.09	19.64	19.60	1.37	-4.428**
	Log of Sales	19.77	19.39	1.25	17.94	17.62	1.22	-5.646**
	Log of Market Value of Equity	19.96	19.77	1.04	18.29	18.54	2.28	-3.398**
	Total Debt/Total Assets	.51	.50	.12	.51	.60	.21	-.149
	Long-term Debt/Total Assets	.49	.49	.14	.46	.52	.18	-.674
	Times Interest Earned Ratio	1.17	1.09	.71	1.95	1.59	1.64	2.219**
	Return on Assets	-1.18	-.77	3.00	.07	.34	4.20	1.349
	Operating Cash Flow Volatility	.79	.70	.19	.78	.76	.36	-.406
	Earnings per Share Volatility	4.42	4.61	2.18	1.90	1.33	1.72	-1.776
	Income before Extraordinary Items Volatility	4.72	3.13	3.38	3.79	2.42	4.08	-.893
Casino	Log of Assets	21.01	21.20	1.53	18.10	18.58	1.78	-8.922**
	Log of Sales	20.53	20.79	1.40	18.11	18.63	1.88	-7.173**
	Log of Market Value of Equity	20.49	20.51	1.53	16.70	16.53	2.39	-9.628**
	Total Debt/Total Assets	.60	.61	.12	.50	.43	.37	-1.788
	Long-term Debt/Total Assets	.58	.60	.13	.41	.35	.38	-3.140**
	Times Interest Earned Ratio	2.47	2.06	1.25	2.97	.81	16.72	.218
	Return on Assets	3.68	3.33	2.57	-1.23	.76	11.87	-2.993**
	Operating Cash Flow Volatility	.56	.54	.11	1.10	.85	.73	-2.113*
	Earnings per Share Volatility	.93	.92	.50	4.19	1.48	6.74	-1.690
	Income before Extraordinary Items Volatility	.89	.91	.40	4.74	1.77	5.86	-1.901

\* p&lt;.05, \*\* p&lt;.01

Further, many US lodging and casino companies have been operating in foreign countries and much of their recent growth comes from overseas expansion. Currency risk is the consequence of the fluctuation of exchange rates and strongly affects the bottom line of the hospitality firms that have presence in foreign countries. Through foreign currency forward contracts, hospitality firms could reduce their exposure to exchange rate movements. By wisely using a forward contract, hospitality financial managers can hedge currency risk, which will contribute to stabilizing the cash flow stream and improving stock performance. Hospitality firms' financial managers, creditors, and shareholders recognize a valuable and necessary role of financial derivative instruments and pays attention to the effectiveness of forward contracts and interest rate swap in reducing the volatility of earnings and cash flow stream. By using financial derivatives such as interest rate swaps and foreign currency forwards, hospitality firms can effectively mitigate risk exposures in modern financial markets where interest rate and currency volatility have become a fact of the business world.

### Limitations

Due to the limited sample size, the researchers were unable to conduct multivariate analyses with sophisticated designs. Statement of Financial Accounting Standards (SFAS) 133, "Accounting for Derivative Instruments and Hedging Activities," requires a firm to report derivatives on the balance sheet at fair value, effective for fiscal years beginning after June 15, 2000. Thus, future research with a more sophisticated design could be accomplished with a larger sample size. It should also be pointed out that financial derivatives are not the only way for hospitality firms to hedge their risk exposures. For example, Barton (2001) showed that derivatives and discretionary accruals are substitutes to smooth earnings. Thus, future research might investigate the effectiveness of various hedging strategies in hospitality firms. Also, the determinants of a firm's hedging strategy choice could be examined in the future studies.

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**Abstract**

This study examines the antecedents and consequences of two emotional labor strategies (surface and deep acting) in the lodging industry. Variety, duration, and positive display rules are predictors of hotel employees' deep acting (modifying inner feelings) and negative display rules are related to surface acting (faking feelings). Employees high in neuroticism are more likely to fake their emotional expressions and those high in extraversion are more likely to try hard to invoke appropriate emotions (deep acting) at work. Results further indicate deep actors are less burnout than surface actors.

Key Words: emotional labor, acting, hotels

**Introduction**

It is commonly known that hospitality front-line employees frequently encounter demanding and difficult customers. Although it is not a pleasant experience, hospitality service agents are often required to be polite and smile in front of the customers. Emotional labor takes place in this kind of service work situation. Emotional labor is the performance of various forms of emotion work in the context of paid employment (Hochschild, 1983). Pugh (2001) demonstrated the display of positive emotion by employees is related to customers' positive affect after service transactions and evaluations of perceived service quality. Ashkanasy et al. (2002) asserted that positive emotional expression by service agents can have a favorable effect on customer retention, recovery, and satisfaction. Despite its benefit to company's bottom line, emotional labor can be detrimental to service providers both psychologically and physically. A growing body of work shows emotion work or emotional labor as one of the major causes of occupational stress and burnout (Wharton, 1993; Kruml & Geddes, 1997, 2000; Morris & Feldman, 1997; Brotheridge & Grandey, 2002; Grandey, 2003). In hospitality academia, there is a dearth of research regarding the causes and consequences of service providers' emotional labor. In addition, most studies published in hospitality and tourism journals rely on qualitative methods. For example, Seymour (2000) interviewed workers in traditional silver service restaurants and fast food restaurants to compare the kind and degree of emotional labor in two different foodservice outlets. Likewise, after conducting a personal interview with staff members working for the pubs in the U.K., Sandiford and Seymour (2002) demonstrated some evidence of emotional labor causing job stress. The authors further found emotions generated at work could carry on outside of work and influence workers' private lives. Therefore, the purpose of this study is to examine the antecedents and outcomes of emotional labor, using a survey (quantitative) method, in the context of the lodging industry.

**Literature Review***Antecedents of Emotional Labor*

The concept of emotional labor originates from Hochschild (1979; 1983). Emotional labor is defined as "the management of feeling to create a publicly observable facial and bodily display" (Hochschild, 1983, p.7). According to her, common expectations exist regarding the appropriate emotional reactions of individuals during service transactions. For example, flight attendants are supposed to feel cheerful and friendly, whereas funeral directors are supposed to feel somber and reserved (Ashforth & Humphrey, 1993). This phenomenon is described as "feeling rules" (Hochschild, 1983) and others refer to it as "display rules" (Ashforth & Humphrey, 1993; Morris & Feldman, 1996). Service providers experience emotional dissonance when the emotions to be expressed differ from the emotions felt (Hochschild, 1983). Employees handle this dissonance either by surface acting or deep acting (Hochschild, 1983). According to her, feelings are changed from the "outside in" in surface acting (faking feelings), whereas feelings are changed from the "inside out" in deep acting (modifying inner feelings).

Hochschild (1983) asserted job characteristics such as numerous interactions with customers may cause the emotional labor. In addition to the frequency of interactions, Morris and Feldman (1996) proposed that the duration of interactions and variety of emotional expression should affect service employees' emotional labor. It is a convincing view that customer interaction variables would be associated with service workers' acting modes. The present paper is the first study to explore this possibility within hospitality academia and the positive relationships between customer interaction variables and two emotional labor strategies are proposed.

*Hypothesis 1a:* Customer interaction characteristics (frequency, duration, and variety) will have the positive relationships with hotel service employees' surface and deep acting.

Wharton (1993) found those who reported high autonomy had lower emotional exhaustion in high emotional labor-typed jobs. The hospitality literature also has shown that job autonomy can alleviate the level of hospitality employees' emotional exhaustion (Kim, Shin, & Umbreit, 2006). Morris and Feldman (1996;1997) suggested employees who have less autonomy over their behavior should feel more emotive dissonance, which likely lead them to fake feelings (i.e., surface acting) and those who have more autonomy are likely to express their true feelings. According to their rationale, job autonomy is not related to emotive effort (i.e., deep acting). In keeping with Morris and Feldman's (1996;1997) work, the following hypothesis is predicted in the hotel work situation:

*Hypothesis 1b:* Job autonomy will have a negative relationship with hotel service employees' surface acting and have no relationship with deep acting.

According to Hochschild (1983), service occupations involve strong norms and/or expectations regarding displays of emotions. Research has shown display rules have a positive relationship with emotional acting (Brotheridge and Lee, 2002). Several studies separate display rules into positive and negative rules. Positive display rules evaluate service providers' perceptions on expressing positive emotions and negative display rules evaluate the perceptions regarding suppressing negative emotions at work. In hospitality organizations such as hotel companies, explicit norms are often included in the job descriptions and employees are trained accordingly (e.g., showing a smile with a cheerful greeting). It is reasonable to assume that the presence of display rules in hotels will increase the likelihood of hotel personnel's emotional regulation resulting in either surface acting or deep acting. Therefore, it is predicted that display rules, regardless of the type of display rules, will affect both acting strategies.

*Hypothesis 1c:* Both display rules will have a positive influence on both acting strategies in hotels.

In addition to job characteristic variables, emotional labor researchers seem to agree that emotional expression is dependent upon enduring dispositional factors (Morris & Feldman, 1996; Tan et al., 2003). The most frequently mentioned dispositional variables in their relations to emotional expression are positive affectivity (PA) and negative affectivity (NA). NA is generally positively related to surface acting whereas PA demonstrates a negative association with surface acting (Diefendorff et al., 2005; Brotheridge & Lee, 2003). Regarding the deep acting mode, neither affectivity variable was found to have a significant influence on deep acting (Brotheridge & Lee, 2003; Diefendorff et al., 2005). Research has shown extraversion and neuroticism are strongly related to PA and NA, respectively although they are broader in scope than affectivity (Watson, 2000). One advantage of using these personality traits, instead of direct measures of affectivity, is that since they are linked to dominant personality framework used in organizational research, we can make broader and more practical inferences (Diefendorff & Richard, 2003). Hence, using the two personality traits of extraversion and neuroticism, the following three hypotheses are proposed in the hotel work situation:

*Hypothesis 2a:* Extraversion will have a negative influence on hotel service employees' surface acting.

*Hypothesis 2b:* Neuroticism will have a positive influence on hotel service employees' surface acting

*Hypothesis 2c:* Neither Extraversion nor Neuroticism will have a significant effect on hotel service employees' deep acting.

### **Employees' Acting Strategies and Burnout**

Job burnout is defined as "a syndrome of emotional exhaustion, depersonalization of others, and a feeling of reduced personal accomplishment" (Lee & Ashforth, 1990, p.743). These three terms are renamed to exhaustion, cynicism, and professional efficacy after development of Maslach Burnout Inventory-General Survey (MBI-GS; Schaufeli et al. 1996) (See the methodology section). Research has shown the causal relationships between employees' acting modes (surface and deep acting) and three factors of job burnout (emotional exhaustion, depersonalization and personal accomplishment)

For example, surface acting was significantly correlated with emotional exhaustion and depersonalization, and negatively correlated with personal accomplishment (Brotheridge & Lee, 2003). Grandey (2003) also hypothesized a direct, positive path from surface acting to emotional exhaustion and the result was supported. However, in Brotheridge and Grandey's (2002) study, the effect of surface acting on emotional exhaustion was too small to support the hypothesis; other hypotheses regarding the influence of surface acting on depersonalization (positive effect) and personal accomplishment (negative effect) were supported as postulated. Brotheridge and Lee (2002) explored the possibility of the existence of intervening variables between emotional labor and burnout. They demonstrated surface acting had an indirect influence on emotional exhaustion, depersonalization, and personal accomplishment via either rewarding social relationships or authenticity or both variables. Despite some mixed findings, the overall consensus is that surface acting brings unfavorable results: increase in emotional exhaustion, increase in depersonalization, and decrease in personal accomplishment.



Therefore, the following three hypotheses are proposed for the present research with the modified burnout terms in MBI-GS:

*Hypothesis 3a:* Hotel service employees' surface acting will have a positive influence on exhaustion.

*Hypothesis 3b:* Hotel service employees' surface acting will have a positive influence on cynicism.

*Hypothesis 3c:* Hotel service employees' surface acting will have a negative influence on professional efficacy.

Regarding the deep acting strategy, the majority of studies show that deep acting produces more favorable consequences than surface acting. For example, deep acting had a positive correlation with a sense of personal accomplishment among three job burnout factors (Brotheridge & Lee, 2003; Brotheridge & Grandey, 2002). However, the relationship between deep acting and emotional exhaustion has been somewhat debatable. Grandey (2003) posited deep acting is positively related to emotional exhaustion, but the result was not significant. In the path model, Brotheridge and Lee (2002) showed deep acting affected emotional exhaustion indirectly through the authenticity variable, whereas deep acting had a direct, negative impact on depersonalization and a direct, positive influence on personal accomplishment. Hochschild (1983) asserted that service providers who identify too wholeheartedly with the job have a higher risk of burnout than those who distinguish themselves from the job. Intuitively, it also makes sense that more energy and efforts are likely required to modify inner feelings (deep acting) than simply faking (surface acting). Therefore, in this study, it is proposed that deep acting will be associated positively with hotel service providers' emotional exhaustion. The following summary shows the three research hypotheses of the present research about the deep acting strategy using the modified burnout terms:

*Hypothesis 4a:* Hotel service employees' deep acting will have a positive influence on exhaustion

*Hypothesis 4b:* Hotel service employees' deep acting will have a negative influence on cynicism.

*Hypothesis 4c:* Hotel service employees' deep acting will have a positive influence on professional efficacy.

## **Methodology**

### *Data and Measures*

A total of 197 hotel service employees participated in the present emotional labor study. These respondents participated in the hotel job burnout research published by Kim, Shin, and Umbreit (in press). The subjects were a convenience sample, recruited through eight human resource managers who were familiar with the School of Hospitality Business Management at Washington State University (WSU). All the lodging properties were located in the state of Washington, USA. Based on the size of the hotel, the number of questionnaires sent to each human resource manager varied from 50 to 220. The participants mailed their questionnaire directly to the author. The average return rate was 20%. The subjects consisted of 62% of female (119) and were, on average, about 36 years old. The respondents came from almost every department in the hotel including front office (39), restaurants (38), sales and marketing (25), housekeeping (23), catering (20), engineering (11), room service (7) and others (15). The subjects' hotel work experience varied from two months to 35 years with a mean of seven years. Keegan and Lucas' (in press) argued the need of extra precaution on postal surveys targeting a business population rather than a general population, especially if the survey contains job-related questions. The low response rate of this study seemed to reflect Keegan and Lucas' (in press) concern.

Gender, experience, and age were included in the questionnaire to be used as control variables later in the analysis. For example, emotional labor researchers argue that females are more sensitive to the emotional cue of others and skillful at the practice of emotion management (Domagalski, 1999; Hochschild, 1983); inexperienced or new workers experience more emotive dissonance or effort because of the company's display rule that they begin to learn (Hochschild, 1983, Kruml & Geddes, 2000); and older employees are more able to control their emotions and display appropriate emotions (Hochschild, 1983, Kruml & Geddes, 2000).

Interaction characteristics (frequency, duration, and variety) were measured with items from Brotheridge and Lee's (2003) emotional labor scale with minor wording changes. For the frequency of interactions with customers (1 item), subjects were asked to rate "on an average day, how frequently" they make face-to-face or voice-to-voice interactions with hotel guests. Duration of emotion work (1 item) was measured by asking respondents an average number of minutes required for a typical service transaction. Lastly, employees indicated the variety of emotional expressions they display at work (3 items,  $\alpha = .84$ ; sample item: "I display many different emotions when interacting with customers"). Autonomy indicates self-determination, that is, the subject's feeling of having control over his or her own work. In this study, Marchese and Ryan's (2001) scale (4 items,  $\alpha = .74$ ; sample item: "I am basically my own boss") was used to measure hotel service employees' job autonomy. The emotion work requirements scale (Best et al., 1997) was used to evaluate the level of hotel companies' display rules. The scale consisted of three items of negative display rules ( $\alpha = .76$ ) and four

items of positive display rules ( $\alpha = .78$ ). Respondents were asked the extent to which they are required to hide (or show) emotion to be effective on the job (sample item: "I show friendly emotions such as smiling, giving compliments, and making small talk").

The two personality traits were assessed with the subscales of neuroticism (10 items,  $\alpha = .84$ ) and extraversion (10 items,  $\alpha = .89$ ) of the Big Five in the International Personality Item Pool (IPIP; Goldberg, 2001). Scales for measuring hotel service employees' two acting strategies came from Brotheridge and Lee's (2003) emotional labor scale. Surface acting consisted of three items ( $\alpha = .69$ ; sample item: "I pretend to have emotions that I don't really have") and deep acting had three items ( $\alpha = .87$ ; sample item: "I really try to feel the emotions that I have to show as part of my job"). Job burnout was measured with the Maslach Burnout Inventory-General Survey (MBI-GS; Schaufeli et al., 1996), a revised version of the original Maslach Burnout Inventory (MBI). Note that MBI-GS is developed to be used in a broad range of occupations and the three job burnout constructs of the original MBI are relabeled: from emotional exhaustion to exhaustion (5 items,  $\alpha = .89$ ; sample item: "I feel emotionally drained from my work"), depersonalization to cynicism (5 items,  $\alpha = .82$ ; sample item: "I just want to do my job and not be bothered"), and personal accomplishment to professional efficacy (6 items,  $\alpha = .68$ ; sample item: "I have accomplished worthwhile things in this job").

### Statistical Design

A total of five hierarchical regression analyses were conducted to test the hypotheses in this study. First, to determine the significant antecedents of emotional labor, two separate regression analyses were run for employees' acting methods of surface and deep acting (dependent variables) with a set of predicted antecedent variables (independent variables). Among independent variables, control variables (gender, age, and experience) entered the regression equation first (step 1); autonomy, frequency, duration, variety, display rules were grouped together as job related variables and entered the model second (step 2); and personality characteristics (extraversion and neuroticism) were added last as another separate group (step 3). Next, the similar hierarchical steps were used to examine the effects of the two acting modes (independent variables) on hotel service employees' burnout (dependent variable). Regression equations were formulated separately for each of the three job burnout outcomes: exhaustion, cynicism, and professional efficacy. The same control variables were used because the burnout literature commonly reported gender, age, and experience as effective demographic variables on job burnout (Maslach, Schaufeli, & Leiter, 2001). After the entry of the control variables (step 1), the acting strategies, which represent employees' chosen efforts in the hotel work situation, were included in the model (step 2). Prior to regression analyses, the Pearson Correlation (not reported here) and tolerance values were reviewed to evaluate the presence of multicollinearity among study variables. Small tolerance values represent high multicollinearity. All variables had tolerance values greater than .80 (cutoff point: .10) implying no presence of multicollinearity (Hair et al., 1995).

### Results

Table 1 presents the findings on the predictors of emotional labor. Overall, both acting models were significant (surface acting:  $F = 3.48, p < .01$ ; deep acting:  $F = 6.10, p < .01$ ) with a total  $R^2$  of 21% and 34%, respectively. Job related variables made a significant  $R^2$  increment for surface acting ( $\Delta R^2 = .10, p < .01$ ) and deep acting ( $\Delta R^2 = .26, p < .01$ ). Among six job-related variables (frequency, variety, duration, autonomy, positive display rule, and negative display rule), only negative display rule ( $\beta = 0.31, p < .01$ ) was significantly related to surface acting, whereas variety ( $\beta = 0.18, p < .01$ ) and positive display rule ( $\beta = 0.33, p < .01$ ) were significant determinant of deep acting. Therefore, H1a regarding the significant, positive relationships between all customer interaction variables (frequency, variety, duration) and two acting methods were partially supported. H1b predicts no relationship between autonomy and deep acting and a negative influence of autonomy on surface acting. H1b was partially supported because autonomy did not show any significant relationships with either acting. H1c was also partially supported because display rules were associated with only one particular acting method. Following the entry of dispositional variables, there were significant increments in  $R^2$  of both acting regression equations (surface acting:  $\Delta R^2 = .08, p < .01$ ; deep acting:  $\Delta R^2 = .04, p < .05$ ). The results of the regression analyses indicate that extraversion may be marginally related to deep acting ( $\beta = 0.15, p < .1$ ) and neuroticism is significantly associated with surface acting ( $\beta = 0.30, p < .01$ ). Hence, H2b regarding a positive relationship between neuroticism and surface acting is supported. The other two hypotheses concerning a negative effect of extraversion on surface acting (H2a) and no relationship between either personality traits and deep acting (H2c) were rejected.

Table 2 presents the results of the regression analyses conducted for each of the three job burnout components. Overall, the model for exhaustion was significant ( $F = 4.34, p < .01$ ), explaining a total of 15% of the variance. The acting strategies had a significant, unique contribution to the regression equation of exhaustion ( $\Delta R^2 = .14, p < .01$ ). Surface acting had a significant, positive beta coefficient ( $\beta = .28, p < .01$ ), although deep acting did not show any significant relationship. The model for cynicism was significant ( $F = 5.12, p < .01$ ) with a  $R^2$  of 17%. The entry of the acting strategy variables added 16 % of the variance to the equation ( $\Delta R^2 = .16, p < .01$ ). Both acting strategies significantly affected cynicism in the

expected direction: Surface acting had a positive beta coefficient ( $\beta = .35, p < .01$ ) and deep acting had a negative coefficient ( $\beta = -.20, p < .01$ ). Lastly, the regression model for professional efficacy was significant ( $F = 2.91, p < .05$ ) with a  $R^2$  of 10%. After the acting strategy variables entered the equation, there was a significant increment in  $R^2$  ( $\Delta R^2 = .09, p < .01$ ). Only deep acting was a significant determinant of professional efficacy ( $\beta = .28, p < .01$ ). Therefore, based on the results, the following hypotheses were supported: a positive effect of surface acting on exhaustion (H3a); a positive impact of surface acting on cynicism (H3b); a negative effect of deep acting on cynicism (H4b); and a positive influence of deep acting on professional efficacy (H4c). The two hypotheses predicting a negative relationship between surface acting and professional efficacy (H3c) and a positive effect of deep acting on exhaustion (H4a) were not supported

Table 1  
Results of Regression Analysis: Antecedents of Emotional Labor

Independent variables	Dependent variables			
	Surface acting		Deep acting	
	Standardized $\beta$ s	$\Delta R^2$	Standardized $\beta$ s	$\Delta R^2$
I: Control variables		0.03		0.04
Duration	- 0.07		- 0.09	
Gender	0.14 <sup>†</sup>		- 0.10	
Experience	- 0.11		- 0.02	
II: Job related characteristics		0.10**		0.26**
Job autonomy	0.05		0.02	
Frequency	0.01		0.03	
Variety	0.11		0.18*	
	- 0.10		0.11	
<b>Duration</b>				
Positive display rules	- 0.02		0.33**	
Negative display rules	0.31**		0.08	
III: Individual characteristics		0.08**		0.04*
Extraversion	0.00		0.15 <sup>†</sup>	
Neuroticism	0.30**		0.06	
<i>F</i>	3.48**		6.10**	
Total $R^2$	0.21		0.34	
Adjusted $R^2$	0.16		0.27	

<sup>†</sup> $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$

Table 2  
Results of Regression Analysis: Outcomes of Emotional Labor

Independent variables	Dependent variables					
	Exhaustion		Cynicism		Prof. efficacy	
	$\beta$ s	$\Delta R^2$	$\beta$ s	$\Delta R^2$	$\beta$ s	$\Delta R^2$
I: Control variables		0.01		0.01		0.01
Duration	0.06		- 0.04		0.07	
Gender	0.01		- 0.05		- 0.06	
	0.03		- 0.01		0.06	
<b>Experience</b>						
II: Acting strategies		0.14**		0.16**		0.09**
Surface acting	0.36**		0.35**		- 0.03	
Deep acting	-0.09**		- 0.20**		- 0.28**	
<i>F</i>	4.34**		5.12**		2.91*	
Total $R^2$	0.15		0.17		0.10	
Adjusted $R^2$	0.12		0.15		0.07	

\* $p < 0.05$ ; \*\* $p < 0.01$

## Discussion

The present research demonstrates customer interaction variables are mainly related to deep acting. In particular, variety and duration were significantly correlated ( $p < .01$ ) with deep acting, indicating that when service encounters are longer, employees may have a better chance to develop proper emotions and those who express more various emotions are more likely to be deep actors trying hard to experience the desired emotions. However, note that only variety appeared as a significant predictor of deep acting in the regression analysis. These two independent variables had a high correlation ( $r = .59$ ), which may explain why the effect of duration became weak in the regression analysis. The relationships between display rules and employees' acting modes are worth noting. It was initially postulated that both display rules would be positively related to both styles of acting. However, the positive display rule seems to lead to only deep acting and the negative display rule leads to surface acting. In other words, when people are asked to display positive emotions (e.g., smiling and being friendly), they actively try to experience the emotions, but when people are asked to hide negative emotions (e.g., suppressing anger), they just pretend not to show those negative feelings.

The finding on the positive impact of negative affectivity (NA) on surface acting has been consistent and the result of the present study also supports it using the personality trait of neuroticism. It may be difficult for individuals who experience negative emotions frequently to modify inner feelings (deep acting) to meet their service role as a happy host in hotels; consequently, they are more likely to fake positive emotions when necessary. The result on the effect of extraversion is interesting. Unlike the previous findings, the current study does not reveal any negative relationship with surface acting. The regression results (marginally significant at  $p < .10$ ) rather indicate some possibility of the positive relationship with deep acting. In other words, hotel personnel high in extraversion actively try to feel the emotions that they need to display to customers. Extraverted individuals are sociable, gregarious, assertive, and active (Goldberg, 1990). Because of their active nature, they may choose to make emotive efforts (deep acting) instead of simply faking emotions (surface acting).

Deep acting did not contribute positively to hotel service employees' exhaustion. Surface acting was confirmed to have a positive influence on service providers' exhaustion. Taken together, these results lead to the conclusion that hotel personnel who feign emotions (surface acting) are more likely to be emotionally exhausted than those who strive to invoke the appropriate feelings (deep feeling). Although these findings contradict Hochschild's (1983) original notion that those who identify too wholeheartedly with the job have a higher risk of burnout, empirical results by other researchers have also shown that the proposition may not be true (Kruml & Geddes, 1997; Brotheridge & Lee, 2003). As expected, cynicism was increased by surface acting and decreased by deep acting and these outcomes are sensible. The harder employees try to feel the proper emotions, the more likely they put themselves in customers' shoes. These employees are more likely to treat hotel guests as persons rather than objects, thereby reducing a possibility of becoming cynical. On the other hand, the more they surface act, the more likely they distance themselves from hotel guests, which ultimately can lead them to be cynical about their job. Deep actors' attempt to reach out customers may naturally encourage them to offer the best, sincere service, resulting in a strong sense of professional efficacy.

## Conclusions and Managerial Implications

Overall, the results of this study on the relationships between two emotional labor strategies and burnout are congruent with the previous findings. Note that emotional labor may not necessarily cause hotel service agents' burnout if they choose to make sincere efforts to experience the appropriate emotions (deep acting). It sends a critical message to hotel practitioners that training may be necessary to change their acting mode into a right one. For example, when hotel guests are angry, service providers should learn to express a "sincere" apology. When the apology is true with proper actions, customers are likely to be satisfied, which in turn, can make employees pleased leading less emotional stress. As the scenario given, deep acting benefits hotel service workers and customers alike.

The result of the present research has confirmed that emotional expression and management is dependent on individual's dispositional factors. It may be important to review hotel job applicants' personality profile prior to selection. Research has shown that the detection by customers of inauthentic expression may lead to even poorer perceptions of service quality (Rafaeli & Sutton, 1987; Mann, 1999). Therefore, hotel human resource managers should consider recruiting people high in extraversion and low in neuroticism because these types of applicants are more likely to express genuine feelings through the deep acting mode.

Among interaction characteristics, the variety of emotional expression significantly resulted in deep acting. The length of service transactions may vary in hotels. For example, sales personnel may speak with meeting planners (potential customers) for a longer period of time to bring in their business than receptionists greeting and checking in guests briefly in the front desk. Although a longer encounter may give a better chance to express a variety of emotions, it seems to be important to train hotel personnel to express various, appropriate emotions even during short encounters with customers. The negative display rule was a significant predictor of surface acting and the positive display rule was a significant

predictor of deep acting. This result suggests that in general, people may experience more emotional conflicts or emotive dissonance when they are told what not to express (negative display rules) than what to express (positive display rules). Hotel management should understand this psychology and strive to communicate more positive norms with employees so that service providers can be motivated to act “in good faith”.

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## Comparative Analysis of US and Canada Convention/Exhibition Center Websites Using a Modified Balanced Scorecard

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### Abstract

The Internet is a predominant tool in meeting planning. Despite the growing importance of convention tourism Websites, previous studies concluded that their effectiveness needed improvement. The main objective of this research was to assess, compare and rank the effectiveness of the largest convention/exhibition (CE) center Websites in the US and Canada. It also assessed their role in providing destination information, and investigated the relationship between the size of CE centers and their Website effectiveness. This study was based on studies by Kim et al. (2003) and Myung et al. (2005), where Websites were evaluated using a modified balanced scorecard.

Key Words: Convention Center, Internet Marketing and Website Analysis

### Conceptual Background

The term *Convention/Exhibition (CE) center* refers to **any** facility without sleeping accommodations that is considered a convention center, exhibition center or a combination of both. Also its main purpose and major activity is the renting of space for meetings, conventions and exhibitions. In addition the center also provides other services such as catering and technology (Montgomery & Strick, 1995). This study defines CE centers as a “facility designed to accommodate multiple groups or extremely large groups; exhibit halls, meeting rooms, ballrooms or banquet space; no sleeping rooms” (Destination Marketing Association International (DMAI) Glossary, n.d.). An *exhibition center* is defined as a “venue at which exhibitions are held” (Accepted Practices Exchange (APEX) Glossary, 2004), that also has no sleeping rooms and that offers complementary services.

#### *Industry in expansion & Need for effective Websites*

The Meetings, Incentives, Conferences & Exhibitions (MICE) Industry is growing at a very fast pace (Weber, 2001). The belief in the future growth of the MICE Industry shows in the impressive investment that is put in the building or expansion of *CE centers*. In 2004, the supply of exhibit space in the US and Canada was estimated to 80.5 million square feet (Detlefsen, 2005). By the end of 2007, it is expected to grow by nearly 5 million square feet. Ironically, although available meeting space is increasing, demand seems to have stagnated (Detlefsen, 2005). With the increasing supply of exhibition space and fragile demand for meetings and conventions, competition among CE centers has become intense. In this context, centers need to find ways to differentiate themselves. Effective Websites have become a key source of competitive advantage, acting as a communication and marketing tool for CE centers.

#### *Internet and convention/exhibition centers*

The Internet plays an increasingly important role for CE centers in terms of marketing and communications, by first assisting them in providing information (Cheung & Law, 2002). In addition to its accessibility, convenience and interactivity, the Internet allows customization and personalized services, a crucial feature in meeting planning. Planners can now use CE center Websites to plan events in totality. From 2002 to 2004, the usage of the Web as a meeting planning tool grew from 41 to 55 percent of planners (Successful Meetings Report, 2005). Surfing for venues, and even booking meeting space via the Internet have become established practices (Davidson, Alford & Seaton, 2002). Other uses of the Internet by meeting planners include submitting Requests for Proposals (RFPs) or Banquet Event Orders (BEOs), promoting events, searching for vendors and booking airlines for attendees (Successful Meetings Report, 2005). Attendees and delegates of a convention also use the Internet to get information about the destination (Kim, Morrison, & Mills, 2003). The increasing usage of the Internet for conventions, along with increasing competition in the industry, and the growing need for effective marketing and communication tools, explain why centers should develop excellent Websites.

### *A need for collaboration – Networking tourism Websites*

The hospitality and tourism industry is characterized by its fragmented nature, i.e., the fact that it involves many destination partners including lodging, transportation, and food and beverage (Weber & Chon, 2002). Despite its fragmented nature, a tourism destination “needs to be promoted in the global marketplace as one entity” (Kotler, Bowen & Makens, 2003). Tourism-related organizations should share information and combine their efforts to promote the city (Kim, Morrison, & Mills, 2003). “It should be possible for all businesses within a tourist destination to link their Websites so that a visitor to one site would easily be able to find out about related facilities at other companies’ Websites” (Palmer & McCole, 2000). The potential to create virtual cooperation among tourism suppliers has not yet been fully tapped (Ismail et al., 2002), and CE center and CVB Websites tend to be too loosely integrated (Myung, Morrison & Taylor, in press). To this day, research has not yet clarified the exact role played by CE center Websites in this destination information network.

### *The US and Canada as meeting, convention and exhibition destinations*

With over 600 meeting facilities nationwide, meetings and conventions represent a 102.3 billion dollar industry in the US (Detlefsen, 2005), and the US is the leading destination for international meetings and congresses. Canada is also among the top destinations for international convention tourism, with Montreal ranked 14<sup>th</sup> among international convention tourism destinations and 2<sup>nd</sup> for North American destinations, behind Washington (Archambault, 2003). Canada positions itself as a close-in alternative to the US. Indeed, Canada today closely resembles the US in its market-oriented economic system (CIA World factbook, 2005). The two countries are the closest trading and business partners. The closeness and interdependence between Canada and the US creates an incentive to compare them.

### *Goals and objectives of this study*

The main objective of this study was to assess and compare the current effectiveness of US and Canadian CE center Websites and the extent to which they function as an information channel for the destination. The main research question was: *Is there a significant difference in overall quality and effectiveness of US and Canadian CE center Websites and the extent to which they function as an information channel for the destination?* The present study also investigated the following question: *Is there a relationship between the size of CE centers and the effectiveness of their Web-based approach?* In other words, is the CE center building frenzy backed up with effective Web-based operations? It is also important to note that Websites can have high maintenance costs and cannot guarantee improvements in terms of competitiveness (Gretzel & Fesenmaier, 2000). A main reason for Website evaluations remains the goal of maximizing return on investment. This study focuses on these websites and their effectiveness.

## **Methodology**

### *Population / Sample*

The population was established based on *Meetings & Conventions’ 2005 GAVEL guide*, from which all facilities that corresponded to the definition of CE centers were retained. Facilities were ranked by total exhibit space, which appears to be of prime importance in attracting conventions (Fenich, 1998). The top 15 in each country was selected, leading to a total sample of 30 CE center Websites. This procedure relies on the assumption that the biggest CE centers have the most developed Web-based technology because of higher budgets, experience, and communication needs.

### *Instrument*

The study was based on a pilot study by Kim, Morrison and Mills (2003) and the works of Myung et al. (2005). Based on these studies, on an extended literature review, and the advice of experts, the evaluation instrument was reviewed, tested and improved. The BSC was adapted to reflect the specificity of CE center Websites. The methodology remained the same: a modified balanced scorecard (BSC) was used. The main purpose of the balanced scorecard, introduced by Kaplan and Norton (1992), is to reflect the idea that business performance is multidimensional; therefore, performance measurement should also include more than one dimension (Feng, Morrison and Ismail, 2002). The scorecard initially included four perspectives: financial, customer, internal business process, and learning and growth. Critical success factors (CSF) are identified for each perspective and a score is given to each CSF. Then, a total is calculated for each perspective and for a total score.

Morrison et al. (1999) modified the BSC to evaluate the design and maintenance of hotel Websites. This modification allowed to better reflect the destination marketing organization situation. Kim, Morrison and Mills (2003) also modified the BSC to adapt to the convention center situation. The modified BSC approach has been used in many other tourism-related Website evaluations (Feng et al., 2002; Ismail et al., 2002; Kline et al., 2004, etc.). The modified scorecard includes four main aspects: technical performance, marketing approach, customer perspective and information perspective. These same perspectives were used again in this study. Each element of the balanced scorecard was based on a dichotomous scale (Yes/No questions).

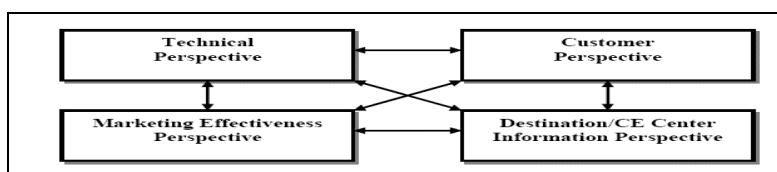


Table 1.  
CE center Sample

US Websites	Square Footage	Canada Website	Square Footage
McCormick Place Convention Center	2200000	The National Trade Centre	1072000
Orange County Convention Center	2112182	Regina Park & Queensbury Convention Center	860000
Georgia World Congress Center	1400000	International Centre	500000
Reliant Stadium	1300000	Metro Toronto Convention Centre	460000
Ernest N Morial Convention Center	1100000	Calgary Exhibition & Stampede	450000
Kentucky Exposition Center	1000000	Montreal Olympic Park	432000
Dallas Convention Center	951776	Northlands Agricom	400000
George R Brown Convention Center	862000	Place Bonaventure Exhibit Hall	280000
Americas Mart Atlanta	850000	Le Palais des Congres de Montreal	200200
Anaheim Convention Center	815000	Winnipeg Convention Centre	160000
The Javits Center	814000	Quebec City Convention Centre	100000
Los Angeles Convention Center	720000	Halifax World Trade & Convention Centre	100000
Washington Convention Center	700000	Vancouver Convention & Exhibition Centre	91205
Cobo Conference & Exhibition Center	700000	Ottawa Congress Centre	84000
San Diego Convention Center	652542	Shaw Conference Center	82000

The technical dimension evaluated 5 CSF: load time, browser compatibility, link check, link popularity and HTML design. Netmechanics.com was used to evaluate technical CSF. The marketing dimension included 25 aspects, divided in 7 categories: tangibility of products, market segmentation, marketing research, relationship and database marketing, partnerships, positioning and branding of CE centers, and positioning and branding of the destination. The customer perspective also evaluated 25 CSF, grouped into seven categories: site navigation, visual attractiveness, contact information, information update, privacy, booking service systems (“how-to-book”), and site accessibility. Finally, the information perspective evaluated 30 CSF, divided into ‘CE center information’ and ‘Destination information’. The presence of information such as meeting rooms, business services, employment opportunities, lodging, and tour itineraries were investigated. Basically, CSF represent the elements that a CE center Website should have in order to be effective.

Figure 1  
CE centers modified BSC approach, as proposed by Myung et al. (2005).



#### Network Score

In order to assess and compare the Websites' level of participation in a destination information network, a composite score was calculated. Websites could be attributed a total of 27 points. The overall easiness of finding destination information on the Website, and the overall comprehensiveness of destination information on the Website had a potential of five points each (Likert scale). Then, Websites were attributed one point for the presence of a link to the Convention and Visitor Bureau (CVB) or Regional tourism board. The three following criteria were also worth one point each: description of the uniqueness of the destination, presence of a city or regional slogan, and mention of the culture / history of the destination. Finally, the remaining 13 points were based on the elements of the destination information perspective (BSC).

#### Data Collection

The data collection consisted of two main phases: a pilot test (to evaluate & modify the instrument prior to real data collection) and a test. Both phases were performed by a group of evaluators: three for the pre-test, and sixteen for the test. All evaluators received a 30-minute training to familiarize with the questionnaire. These evaluators were selected based on their knowledge about marketing and hospitality and tourism management. All evaluators were Masters' students at Purdue University, and had taken a course about Information Technology in Hospitality and Tourism. Due to the changing and dynamic nature of Internet, evaluators were asked to complete all evaluations in the same day. Each evaluator

also used the same type of computers and Web browser from a university lab. Each evaluator was asked to evaluate 15 CE center Websites, which were selected randomly, with a fairly balanced share of US and Canadian Websites to evaluate. The order to which site were rated was also selected randomly, giving an equal chance to each Website to be evaluated first. Evaluators had to complete an online questionnaire for each Website, which was developed with the Purdue University Hosted Survey software. The questionnaire only had three perspectives, as the fourth one – technical - was completed by the research team with NetMechanic.

### Data Analysis

In a first step, the points obtained for each critical success factors in the BSC were summed up to obtain a total score for each perspective (technical, customer, marketing and information) and for each CE center Website. Each CSF represented one potential point, for a total of 110 points. Each of the four perspectives was allotted 25% of the points. All of the perspectives equaled 25 points each except the information perspective which contained 30 points. Scores were recalculated so that the total is 100 points, and the average score of all evaluators for a single Website was retained. The second step was to obtain total scores for each country – US and Canada in order to compare them. All fifteen Website scores from each country were summed up to obtain perspective scores and total scores. Again, the average score of all evaluators for each Website was used. Then, it was determined with statistical consultants that the best statistic for inter-rater reliability in this case was Intraclass Correlation (ICC). “ICC assesses rating reliability by comparing the variability of different ratings of the same subject [Websites] to the total variation across all ratings and all subjects” (Uebersax, 2003). The ICC for this study was 0.662, which indicates good inter-rater agreement and, more specifically, that 66.2 percent of the entire variability in the scores assigned to CE center Websites is due to the Websites themselves, whereas 33.8 percent of the variability is due to raters.

The fourth step in this study was to compare the US and Canada on their respective scores on the BSC. The Wilcoxon Mann-Whitney T-Test was used to compare these two populations (Wuensch, 2003). This test is used instead of a two sample t-test when the groups being compared do not follow a normal distribution. Finally, in order to assess the relationship between the size of CE centers and the overall effectiveness of Websites, Pearson’s correlation was used. Pearson’s correlation coefficient assesses the extent to which **two** variables are “proportional” to each other (Garson StatNotes, 2005). The SAS and SPSS statistical packages were used to calculate the different statistics required for this study.

## Results

### Main finding No.1

*There is no significant difference in the total scores and perspective scores obtained by the US and Canada on the modified BSC.* Table 3 shows the mean scores obtained by the US and Canada for all four perspectives. The results obtained by each country are very similar on all perspectives. The Mann-Whitney -Wilcoxon W t-test for non-parametric statistics concluded that there were no significant differences on the mean scores obtained by each country on all four perspectives, and on the total score.

Table 3  
Mean Evaluation Scores by Country and by Perspective

Country	Technical	Marketing	Customer	Information	Total
Mean for US	17.53	10.38	16.81	17.04	61.77
Mean for Canada	16.47	9.994	15.97	15.34	57.97

Table 4  
Perspective Scores by Country: T-Test for Non-Parametric Statistics

Perspectives	Mann-Whitney	Wilcoxon W	Sig (2-tailed)
Technical	82.5	202.5	0.2161
Marketing	89	209	0.3399
Customer	80.5	200.5	0.1911
Information	76	196	0.1353
Total	75	195	0.1249

### Main finding No.2:

*Poor overall performance* As shown on Table 5, the overall average score for all CE center Websites evaluated was only 58.49, with a minimum score of 42.07 and a maximum score of 67.62. The mean scores obtained by both

countries are relatively low (US: 61.77; Canada: 55.21). The US got a slightly higher overall score than Canada, but this difference was not significant. The large score range obtained in both countries indicates that within a same country, there are important differences in Website effectiveness.

Table 5  
Overall Website Performance by Country: Descriptive Statistics

Country	Mean	SD	Variance	Range	Max	Min
US CE Centers	61.77	7.5	56.27	25.55	67.62	42.07
Canada CE Centers	55.21	6.55	42.95	20.33	65.64	45.31
<b>Total</b>	<b>58.49</b>	<b>7.17</b>	<b>51.47</b>	<b>25.55</b>	<b>67.62</b>	<b>42.07</b>

*Main finding No. 3:*

*There is no relationship between the size of CE centers and the effectiveness of their Web-based approach.* It seems logical that larger and more developed CE centers should have developed an online tool that supports the importance of its operations and business. In order to determine if this intuition is true in real life, a Pearson correlation was conducted with, as a first array, the size of CE centers (sq. feet), and, as a second array, the score (out of 100) obtained by each CE center Website. The Pearson correlation coefficient was 0.176, which indicates a very poor relationship.

*Main finding No.4:*

*The best and the worst: Strengths and weaknesses of US and Canada CE centers.* As shown on Table 6, the San Diego Convention Center (US) got the highest score (67.62), while the Detroit Cobo Conference & Exhibition Center (US) got the lowest score (42.07). The top five Websites consist of 4 Websites from the US and only one from Canada (in 3<sup>rd</sup> position). In the US, San Diego Convention Center got the highest score (67.62), followed by the Georgia World Congress Center (66.67) and the Orange County Convention Center (65.28). The three lowest scores were given to New York's Javits Center (54.79), the Reliant Stadium (44.48), and the Cobo Conference & Exhibition Center (42.07). In Canada, the highest score was given to the Calgary Exhibition & Stampede Website (65.64), followed by Toronto's Metro Convention Centre (64.19) and the International Centre (62.40). The three least effective Websites were the Halifax World Trade & Convention Centre (49.50), the Northlands Agricom (47.33), and the Regina Exhibition Park & Queensbury Convention Center. Because of the intense competition within the MICE industry, Canadian CE centers need to increase the appeal and effectiveness of their Websites. Internationally, Canada CE centers are not as much known as US CE centers, increasing even more the need to better their online presence.

Table 6  
Overall Website Performance Scores by CE Center and by Perspective: Means

CE Center RANK	Country	Technical	Marketing	Customer	Information	Total
1) San Diego Center	US	20	11.14	18.86	21.14	67.62
2) Georgia World Congress Center	US	17	13.71	17.86	21.71	66.67
3) Calgary Exhibition & Stampede	Canada	21	11.57	17.00	19.29	65.64
4) Orange County Convention Center	US	16	13.50	20.50	18.33	65.28
5) Washington Convention Center	US	18	12.88	18.75	18.75	65.25
26) Halifax World Trade Centre	Canada	15	8.17	14.67	14.00	49.50
27) Northlands Agricom	Canada	17	7.86	14.14	10.00	47.33
28) Regina Park & Queensbury	Canada	13	8.86	14.29	11.00	45.31
29) Reliant Stadium	US	15	6.75	15.75	8.38	44.48
30) Cobo C&E Center	US	15	5.71	11.00	12.43	42.07

Overall, the US CE centers had many advantages over Canada. Technically-speaking, the US had better load time and link popularity. In the marketing aspect, the US was better at tangibilizing the product, i.e. providing maps of the facility and good description. The US had better market segmentation, with more sections reserved specifically for meeting planners (Sig. = 0.058), delegates and attendees (Sig. = 0.003), exhibitors and vendors (Sig. = 0), and the public and

community (Sig. = 0.025). This makes site navigation easier, and allows customers to save time in searching for information. The US outperformed Canada on positioning statements (Sig. = 0.094), which means that they were better at promoting their identity and uniqueness to customers via a positioning statement or slogan. In the customer perspective, the US got a significantly higher score on the simplicity and easiness to remember their Websites domain names and URLs (Sig. = 0.015). This is an important advantage to retain meeting planners and to create awareness. Second, the US scored significantly higher on the availability of clear and effective navigation tool bars on all pages of its Websites (Sig. = 0.01). Third, the US was better at providing information on their Websites that was current and timely (Sig. = 0.069). This indicates that the Websites mentioned the last information update, and that the delay was maximum 3 months. Next, the US had a significantly higher score for including Websites' privacy policy (Sig. = 0.007) and copyrights disclaimers (Sig. = 0). Lastly, the US CE center Websites provided significantly more online booking systems, an important feature in today's convention planning (Sig. = 0.042). Finally, in the information perspective, the US received a higher score for providing on its CE center Websites the rates for renting meeting and exhibition space, a crucial element in convention planning (Sig. = 0). The US was better at describing on its Websites the facility policies and procedures (Sig. = 0.002). Finally, the US offered more local maps and driving directions within the destination where the CE center is located (Sig. = 0.079).

Canada CE center Websites' strengths include mentioning on their Websites awards and recognitions that CE centers received (Sig. = 0.065). This helps differentiating the CE center and tangibilizing the product/experience. Canada also outperformed the US for providing CE center Websites in more than one language, which attracts a broader target market. Overall, Canada was better at promoting the uniqueness of its CE centers via a detailed description of their competitive advantage (Sig. = 0.064), and the mention of a purpose or mission statement (Sig. = 0.078). In the customer perspective, Canada provided significantly more mailing address information (Sig. = 0.034) and telephone and fax numbers (0.011), two important pieces of information for meeting planners. Finally, in the information perspective, Canada described significantly more the culture, history and uniqueness of the destination, which indicates that it allows importance not only to the center itself, but also to the tourist destination behind it (Sig. = 0.042). This is a strong advantage for the national tourism industry as a whole.

The major weaknesses highlighted by this study were in the marketing perspective. As concluded in many previous studies, marketing scores were very low, and were the lowest perspective score of all four perspectives (mean average of 41.5% for the US and 40% for Canada) indicate extremely poor results for both countries. First, relationship marketing needs to improve, especially in Canada. It is a must that all Websites develop clear market segmentation on their Websites in order to appeal to the different people involved in convention planning (vendors, planners, etc.). The language options are a must, especially for international meetings. The US in particular needs to appeal to this issue. Also, CE center Websites must provide sufficient contact information, including e-mail, phone, and fax. Another major marketing aspect to improve is positioning. Website should highlight competitive advantage, to promote the uniqueness of the facility, and to create awareness. In the customer perspective, many aspects need improvement, notably Websites' interactivity. Many Websites (especially in Canada) still don't offer online booking, or simply do not provide elements to facilitate online booking. Clear booking instructions should always be provided, along with clear and current information about the facilities and its rates. Privacy policies and copyrights should always be stated. Without a doubt, the use of visuals remains a key to attract and retain customers on a Website.

#### *Main finding No 5:*

*Network scores are low, and there is no significant difference between the US and Canada in their participation to destination information networks.* There were no significant differences between the US and Canada on their participation in destination networks. Overall, the scores obtained for the destination network participation were very low. The mean score for the US was 14.62 out of 27 (54.15%), while the mean score for Canada was almost the same, with 14.50 out of 27 (53.72%). In the US, the Georgia World Congress Center obtained the highest network score (72.48%), followed by the Los Angeles Convention Center (65.74%). The lowest scores were given to Atlanta's America's Mart (43.91) and the Reliant Stadium (33.33%). In Canada, the Quebec City Convention Centre was the best in participating in a network for its destination, with 72.22 percent. Vancouver Convention & Exposition Centre and the Metro Toronto Convention Centre ranked second and third, with 68.25 percent and 63.89 percent respectively. The lowest network scores were given to the Place Bonaventure Exhibit Hall in Montreal (36.5%) and Regina's Exhibition Park and Queensbury Convention Center (34.92%). This is a deceiving score for the city of Montreal, one of Canada's main tourism destinations. Considering the fact that the many players of a tourist destination should consolidate their effort to promote the city, it appears obvious that CE centers are not making this idea as a priority. CE centers still rely on Convention and Visitor Bureau (CVBs) Websites as the main artery for disseminating destination information. The question is then asked, since there are many different sources of destination information, including CVBs, hotels, and attractions, should CE centers really emphasize this aspect?

Five percent of CE centers in the US are run by CVBs (Meetingsnet.com, 2005). Many of these cities have consolidated their CE center and CVB Websites, therefore providing 'one-stop shopping' to meeting planners. Without a doubt, consolidation in the MICE industry has become a big trend which allows meeting planners to save a lot of time by finding all necessary information in one large database. For example, Conventionzoo.com offers an all-in-one convention portal for all groups (planners, attendees, etc.), and has set up the necessary partnerships to allow the booking of flights, hotels, vacation packages, and cars (Conventionzoo.com, 2005). CVB hotrates.com is another portal which allows selecting the best hotel deals within a city. The downside of such portals remains that is not as comprehensive as individual Websites. Conference centers in North America are already consolidated under the International Association of Conference Centers. It is therefore likely that the CE industry will soon offer portals which allow the complete booking of conventions, accommodation, and tourism activities. In this context, what will become the real purpose of CE center Websites?

## Conclusions

Despite the increasing importance of the Internet in meeting planning, Websites remain weak. Even very large convention centers have scored very poorly on this study, indicating that the effectiveness of Web-based approaches may not always support the complexity of CE centers' operations. The strengths and weaknesses of each country were highlighted, with indications on how to improve these issues. The study also concluded in a questionable role for CE center Websites. With many sources of destination information, CE centers do not seem to prioritize the display and linkage to this information. On a broader scale, with consolidation of information, most of the CE center information is available via other portals, leaving CE center Websites with an unclear role. For now, what one can conclude is that considering the increasing usage of the Internet by meeting planners and attendees, CE center Websites need to improve their effectiveness. What can also be said is that these Websites do not seem to aim primarily at providing destination information, which is a point to improve considering the trend 'one-stop shopping' trend among impatient Internet surfers. Ideas for future research include surveying meeting planners and attendees on their usage of CE center Websites, and their level of importance compared to other portals of information. Similar Websites analyses could also be performed in other segments of the tourism industry to evaluate their participation in the destination information network. This study had certain limitations, including the restricted size of the sample and the small number of evaluators. The very long length of the questionnaire can have caused fatigue among evaluators, therefore potentially introducing bias. Inter-rater reliability could also have been improved.

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## Factors Affecting the Visitor's Motivation to Leisure Farm in Taiwan

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### Abstract

The purposes of this study were collected the questionnaires from the five leisure farms' visitors in Taiwan. Seven hundreds and eighty questionnaires were given out and 735 completed questionnaires were received. The statistical analyses of this study were using descriptive analysis and factor analysis. Relaxation, attraction and knowledge were the three main factors of motivations including push and pull factors. The first-ranked item of these motivations is 'I can share time with my friend and family'. It is showed that mean values of the push items are much higher than those of the pull items.

**Key Words:** leisure farm, motivation, factor analysis

### Introduction

Tourism is one of the fastest growing industries in the world. It is often regarded as a display of social status as it is associated with the time and income at discretion. Farm tourism is not a new phenomenon. Frater (1983) recognized that in certain parts of Europe, it existed as a recognizable activity for over a hundred years. It can defined the declining labor force, changing farm structure, increased intensification and specialization of farming activities, together with a decline in farm income (Frater, 1982). The inability to generate sufficient revenue has, in many cases, led farmers to diversify and undertake majority activity (Fleischer and Pizam, 1997). Bowler et al. (1996) describe a decision-making model for the development of farm business. Farm tourism has been primarily developed for its economic benefits and represents a symbiotic relationship for areas where neither farming nor tourism could be independently justified; and the other two primary concerns of the farmer have been to generate additional income and provide economic benefits to the local economy (Inskeep, 1991). Taiwan is an island with tradition agriculture for a long time. To develop the leisure agriculture and upgrade rural life is the major target in the year of 2005. In order to get the goal of government, we collected the date from leisure farms' visitors in the north of Taiwan. Therefore, it is necessary to find out what variables are important in explaining variances of the motivations, since identifying the variables that influence the visitors' leisure motivation allows the marketers to effectively understand the motivations and to efficiently communicate with the visitors' market.

### Literature Review

#### *Leisure motivation*

Leisure has been defined as what people do when they are not working. Activities become leisure primarily because they are carried out in a period designated as free-time. Some free-time activities may be relaxing or entertaining but are not so easily recognized as leisure (Hills et al., 2000). Mook (1996) also defined motivation as the cause of human behavior. Kaplan (1975) considered that the functions of leisure include self-determination and the encouragement of pledge, as well as providing opportunities for recreation, personal growth and service to others. More recently several studies have identified positive correlations between the enjoyment of leisure and well-being for young adults (Haworth and Hill, 1992), over-stressed workers (Shephard, 1988) and in later life (Kelly et al., 1988). According to Romsa and Blenman (1989), socioeconomic variables including age, gender and economic status, play a crucial role in the vacation behavior of travelers. Leisure motivation is a vital variable in comprehending why people travel, because it is the driving force behind behavior (Crompton, 1979). Ooi (2002) indicated that authenticity-seeking tourists want to gratitude, to participate in the local cultures, to eat local food in order to experience authenticity. During the limited time spent in a place, shopping is probably one of the easiest and best means of experiencing the uniqueness of native tourism (Hsieh and Chang, 2006). Tourist shoppers may seek unique products and souvenirs and are concerned about the brand names and logos, product and package size, price, product attributes and location of stores (Turner and Reisinger, 2001)

### *Push and Pull factors of motivations*

Push motivation is an internal energy and increases the will for people to travel, whereas pull motivation is an external force and emotions where people travel. Common push factors found in most of the studies include knowledge-seeking, relaxation, family togetherness, while most frequently seen pull factors are natural and historic environment, cost, facilities, safety, and easy-to-access (Dann, 1977). Crompton (1979) sought to draw the push motives (escape, self-exploration, relaxation, prestige, regression, kinship-enhancement, and social interaction) or pull motives (novelty and education). Many studies have attempted to find push and pull motivational factors in different settings such as nationalities (Zhang and Lam, 1999), destinations (Jang et al., 2002) and events (Lee et al., 2004).

### *Farm tourism*

Farm tourism has clear ingredients of small scale enterprises with local roots based on local traditions. Farm tourism also stresses the relations in host and guest, the interaction between the host's private life and the guest's experiences. It was organized as the truly and noncommercial form of tourism. It is cheap and aims to make people feel friendship with each other. The definition for farm tourism was the consumer recognizes the farming environment as part of the overall tourism product (Busby and Rendle, 2000). Farm tourism is a subset of rural tourism. Prices and sales in the rural tourism market are determined simultaneously by supply and demand. The demand side reflects the value visitors attach to a stay in accommodations. Farm accommodations vary in visitors' attributes, we expect visitors to attach different values to different attributes, one of them being the existence of a working farm. Profits can increase if visitors are willing to pay a higher price for an attribute or if the business is operated more efficiently. A review of literature shows that, the economic dependency on tourism emerges as significant variable and favorable attitudes toward tourism development (Snaith and Haley, 1999).

## **Methodology**

### *Sampling*

One hundred questionnaires were distributed for the purpose of pre-testing in May 2005. Based on the comments collected during the pre-testing period, a complete questionnaire was designed. A quota-sampling method was adopted for data collection. The number of questionnaires distributed in each farm was based on the number of visitors' coming. The questionnaires were distributed to guests who visited resort farm in Taiwan. The questionnaires were collected from visitors who were over 15 years old to the resort farms near the north of Taiwan through 11, July to 20, Sep. 2005. Out of 780 questionnaires that were distributed, a total of 742 (95.1%) questionnaires were returned. Of the returned questionnaires, 7 were eliminated because of an excessive amount of missing data. After elimination, 735 questionnaires (94.2%) were coded and analyzed for the empirical investigation.

### *Design and Development of questionnaires*

The questionnaire was developed based on a comprehensive review of visitors' motivations from literature. The questionnaire consisted of three sections. The first were asked the consumer behavior including how often go to resort farm in one month, stay time, traffic tools, fees, companions, the sources of travel information. The second section measured the motivation. The items of travel motivation were rated on a 5-point-Likert scale ranging from 1 (strongly disagree) to 5 (strong agree). The third section was designed to obtain the respondent's demographic and characteristics including age, gender, economic status, marital status, vocation, place of residency.

### *Data Analysis*

The collected data were analyzed using Statistical Package for Social Science (SPSS) version 10.0. *Descriptive statistics.* The socio-demographic characteristics and the raking of motivation items were summarized by descriptive statistics. *Principle component analysis.* Principal component factor analyses with varimax rotation were performed to identify underlying dimensions associated with motivations of visitors. Only items with factor loadings greater than 0.5 were retained for each factor grouping. Factors with eigenvalues greater than 1 were reported in the final factor structure. Only eleventh items were retained in the process. Cronbach's alpha was applied to test the reliability of factor groupings.

## **Result and Discussion**

The profiles of the visitors are as follows: the ratio of female and male respondents was nearly 1 to 1. Age was mainly from 31 to 40 years old (40.8%). The average income is about NT\$ 25,001-60,000(75.2%). Above college-degree respondents dominated (69.8%). Most of the respondents were married and with children (70.8%). Their occupations are predominately businessmen (27.5%) and service men (28.0%), followed by self-employed (14.6%), students (9.5%) and others. The place of residency was 83.7% located in the north of Taiwan. This result was also consistent with the fact that most of the respondents had income. The visitor preferred to visit place not too far, it would be reduce the waste time during on the road.



As mentioned earlier, the importance levels of visitors' motivations were expressed with a five-point Likert scale. The importance rankings of motivation items including push and pull factors are presented in Table 2. The first-ranked push item is 'I can share time with my friend and family' with a mean value of 4.1. The other two items ('Outstanding scenery' and 'It's important for me to experience different cultures and different ways of life') appear the scores are above 4.0. On the other hand, the least important item belong to pull factors is 'special events and attractions', the mean score is 3.50. It is noted that among these items, it is still slightly above 3.0, which is neutral. From the push items, it is possible to understand the visitors consider feeling quality when deciding travel destinations. It is showed that mean values of the push items (3.83 to 4.10) are much higher than those of the pull items (3.50 to 4.05). There are the opposite results in the senior' travel motivation (Jang and Wu, 2006). The visitors to visit the leisure farm is an internal energy and increase the activity for young people bring their family to visit. They enjoy in their leisure life on free time. Motivation refers to a psychological condition in which the individual is oriented towards, and tries to achieve, some kind of fulfillment. Another, motivation is a state of need or a condition that drives an individual toward certain types of action that are seen as likely to bring satisfaction.

Table 1  
Pull and Push Motivation for Visitors

Factors	Mean	S.D.
Pull factor		
Outstanding scenery	4.05	0.76
Facilities for physical health	3.92	0.85
Available of special shopping facilities	3.53	0.85
Special events and attractions	3.50	0.93
Push factor		
It can share time with my friend and family	4.10	0.83
It's important for me to experience different cultures and different ways of life	4.00	0.84
I attend events that I never	3.92	0.83
Just resting and relaxing for me	3.90	0.88
I want to see the thing that I never	3.87	0.80
A comfortable environment	3.84	0.84
I like to see how other special people live	3.83	0.90

It is more important to consider the motivational patterns or constructs to further comprehend the principal driving forces of the visitors than to look at individual motivation items. Factor analysis is a common statistical technique to uncover such patterns or constructs. The number of factors was determined by retaining only the factors with an eigenvalue of 1 or higher. Three push factors were derived from the factor analysis of 11 push items (Table 2) and were labeled including relaxation, attraction and knowledge. These factors explained 56.512 percent of the variance and the KMO was 0.904. Out of the three underlying factors, relaxation items emerged as the two most important factors to motivate the with the mean importance scores of 3.93. They were followed by attraction and knowledge. The reliability alphas to check internal consistency of items within each factor ranged from 0.62 to 0.74. There are similar results as below. The factors of

Table 2  
Results of Motivation Factor Analysis for Visitors

Factors (reliability alpha)	Factor loading	Eigenvalue	Variance explained	Mean
Factor 1: Relaxation (0.74)		2.298	20.893	3.93
Outstanding scenery	0.740			
Just resting and relaxing is trip enough for me	0.737			
A comfortable environment	0.668			
Facilities for physical health	0.664			
Factor 2: Attraction (0.68)		2.049	18.626	3.62
Available of special shopping facilities	0.822			
Special events and attractions	0.780			
I like to see how other special people live	0.463			
Factor 3: knowledge (0.62)		1.869	16.993	3.97
It's important for me to experience different cultures and different ways of life	0.670			
I attend events that I never	0.669			
It can share time with my friend and family	0.645			
I want to see the thing that I never	0.545			
Total variance explained			56.512	

\*KMO is 0.904

the traveler groups in that they all resulted in knowledge seeking as a key factor (Horneman et al., 2002). The result is not consistent with Huang and Tsai's (2003) finding that the get rest and relaxation as the most important motivation of Taiwan visitors. The result is similar to Huang and Tsai (2003) in that 'natural and historical sight' appeared to be an important motivational factor. Novelty-seeking (79.9%), experiencing local culture and customs (58.4%), and exercising (56.1%) were the three major factors that attracted visitors to visit the tourism place (Hsieh and Chang, 2006).

## Conclusions

The main purpose of this study was to describe the motivations of visitors to leisure farm and to study variables thought important in explaining the underlying these motivation. Using factor analyses, this study identified motivation factors based on three factors including 'relaxation', 'attraction' and 'knowledge'. 'It can share time with my friend and family' was viewed as the most important motivation. With regard to these results should help tourism industries to develop effective marketing programs to attract the more travelers to visit leisure farm. This study also indicated that the wealthy business group or school teacher would be an appropriate target for advertising unique destinations for relaxing or company (school) travel. More importantly, the marketers would expect the word-of mouth effect since the visitors like to talk about their experience when they return home. This is a notable finding that service providers in travel destination should be aware of; they have a key role in producing positive word-of-mouth transmission in this specific travel segment. The finding that knowledge was the most important factor may be biased because respondents in classrooms for continuing education inherently seek knowledge and so may differ from the population of Taiwan. Thus, in any future study, motivations should be separately examined for different travels by age, local and so on.

In the further development on the farm tourism, many countries like Sweden, self-catering is now the norm. Influences from the farming movements have been predominant. And, the symbiosis seems to be more between farming movements and farm tourism, than between host and guest. Farm tourism is not a good business for all. There are obviously other driving forces for the development of farm tourism. The most appalling evidence for that is the very similar marketing material for most countries, material that has not been produced by the single farmer but by central organizations like the Farmers' Union. Among previous results, residents supportive of tourism development in an area are generally young, affluent, and educated (Teye et al., 2002). Similarly, there is evidence that male residents are more supportive of tourism compared to their female counterparts (Mason and Cheyne, 2000). Ethnicity is another demographic factor that has been found to influence resident attitudes in some studies (Besculides et al., 2002), particularly about issues related to cultural impacts of tourism. It is a major point to create the new products and activities in order to meet the visitors' wants and need. Some limitations in this paper need to be addressed. Recognition of these should help to refine future research efforts. The leisure farm was conducted in the north of Taiwan. Therefore, the generalization of results to other locations is in doubt. Another, we don't have care about the seasons about winter or summer vocations. In future avenue of research, variables such as purpose of different visitors should be more controlled. Therefore, the sampling unit is encouraged to be extended to other groups. For example, some studies could be conducted among different age groups so as to compare the influence of their motivation in pull and push factors. Evidently, this research is just a beginning step toward understanding visitors' behaviors and perceived problems in Taiwan leisure farm.

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## The Job Satisfaction of Internship for the Hospitality Student in Taiwan

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### Abstract

Seventy-seven percents of the students were female and worked time focused on semester and summer vacation (96.9%). More than half worked in restaurants and 62.9% of the respondents showed had trained during internship. Principle component analysis was used to determine the satisfaction dimension in supervisor, learning, environment, administration and relationship. The first-ranked factor of the satisfaction is relationship. Regression analysis indicated that the students' confidence for future career had the most effect on administration and learning. There are significant differences in supervisor and learning between training and no training.

Key Words: hospitality, internship, job satisfaction

### Introduction

Through the changes of economics and the increase of national income, food and beverage becomes diversity and variety by the reason of the revolution of tourist environment in Taiwan. The business of tourism likes as hotel, restaurant, travel agency, resort growth very fast in Taiwan. In today's competitive society, students are faced with a selective job market which places premium on experience. The hospitality industry needs a capable, educated, and well-trained workforce in order to be successful in the competitive market (Purcell, 1993). Hands-on experience cannot be imparted through lectures. It can only be gained through direct activity or real world confrontation (Collins, 2002). Therefore, it is vital for hospitality students to experience real job situations while they are in school so that they can have realistic expectations of their careers. There are a lot of papers discussed in the education programs and curriculum of hospitality. It is not very clear about these students' satisfaction for their internship life and expectations in Taiwan, especially in general university. The purpose of this study was to understand the job satisfaction during internship period and the confidence for the future career of students. The results would be provided the references for school curriculum design and business's attribute for these students.

### Literature Review

#### *Internship for hospitality student*

The term of 'internship' is a bridge from classroom to workplace. It is an opportunity to test skills, interests and career choices in real work situations while obtaining an edge on "inexperienced" job market competitors (Neuman, 1999). Students have more chances to explore future careers through internships, to gain deeper knowledge of details, and to start thinking about their future careers based on their internship experiences (Nelson, 1994). A majority of industry professionals agreed that hospitality students who have participate in internship programs are more marketable (Petrillose and Montgomery, 1998). Some researches see internship as an opportunity to network, to learn new fields, or gain work experience (Seymore II and Higham, 1996). Additionally, company and industry groups should be encouraged to support internship programs and disseminate information on successful programs and interns. This constitutes good advertising for university and college programs. The essential point is that internships offer excellent return to all parties involved (Knouse et al., 1999). If the students do not have successful internship experiences, they are less likely to consider the hospitality industry for possible future careers. Hite and Bellizi (1986) found that students view internships as valuable learning experience, for which they should receive academic credit, financial compensation, and earn a grade. They also feel that internships are more valuable than case teaching, that formal training should be at the beginning of internships and direct supervision present throughout. From the employer's perspective, it is a "golden opportunity to try before buying" students they might wish to recruit after graduation (Neuman, 1999). If employed that interns require less training and less time adjusting than do non-interns. Internship's students learn quickly and represent flexible economic resources (Pianko, 1996).

### *Training*

Training plays a critical role in the hospitality industry where quality to be the most important characteristic differentiating a company from its competitors. The aim of training program is consequently to enhance business performance of organizations and effectiveness of a training program can thus be conceptualized as training acquisition and transfer of training (Tracey et al., 2001). Training is 'a planned effort by a company to facilitate employees' learning of job-related competencies (Noe, 2002). The increasing pressure for improving firm performance forces hospitality managers to focus on employee training. Employee training is particularly important in the service industry such as restaurant because costs associated with employee turnover and customer dissatisfaction can be reduced by employee training (Kraiger, 1993). Therefore, restaurant managers should pay increased attention to strengthening employee skills, knowledge, and abilities to meet customer demands. The culinary field is apparently interdisciplinary with knowledge/ skill requirement needs in technical culinary skill, communication skills, business knowledge, food science, and other (Harrington et al., 2005).

### *Job satisfaction*

Job satisfaction is an attitudinal measure which relates perceptions of past events and rewards to current impressions of a job (Lawler, 1986). It refers to the employees' general affective evaluation of their job. Employees' perceptions of job satisfaction are particularly relevant in service-based organizations due to its empirical relationship to organizational outcomes such as turnover intention (Davy et al., 1991), organizational commitment (Brooke et al., 1988), job performance (Meyer et al., 1989), and customer satisfaction and customer involvement in the service exchange (Lengnick-Hall, 1996). It is anticipated that employees reporting higher levels of organizational support are more likely to be satisfied with their employment situation in terms of reported job satisfaction. In the hospitality industry, job satisfaction helps to ensure that employees will treat customers with the utmost respect (Arnett et al., 2002). Employees who are satisfied with their jobs have greater organizational commitment than do dissatisfied employees. Shaw (1999) argued that there is a strong negative relationship between job satisfaction and the level of employee turnover, if an individual's personal positive affect is taken into consideration. Petrillose and Montgomery (1998) suggested that there is a need for research to investigate students' perceptions on internship qualities and whether the experiences could help preparing them for careers in the hospitality industry. Therefore, the objective of this study was to examine hospitality students' attitudes toward internship program of the hospitality students enrolled in order to arrange the internship program about students in the north of Taiwan general university.

## **Methodology**

### *Sampling and Data Collection*

The sampling space for this study consisted of general university students enrolled in hospitality programs in the north of Taiwan. All students enrolled in hospitality related departments, such as Food and Beverage Management, Tourism, Leisure Management were surveyed. Fifty questionnaires were distributed for the purpose of pre-testing. Based on the comments collected during the pre-testing period, a complete questionnaire was designed. Out of 300 questionnaires that were distributed, a total of 295 (98.3%) questionnaires were returned. After elimination, 291 questionnaires (97.0%) were coded and analyzed for the empirical investigation.

### *Design and Development of Instrument*

The questionnaire was developed based on a comprehensive review from literature. The two-section questionnaire included 24 questions designed to assess students' satisfaction, and 6 questions were designed to collect participants' internship preferences and demographic characteristics, including gender, internship time, placement of internship, training, salary, and the level of confidence for future work. In the first section, students were asked to indicate the degree to which they satisfy or unsatisfied with each of the statements on a 5-point Likert scale. Statements are rated on a scale from (1) strongly unsatisfied; (2) unsatisfied; (3) equal; (4) satisfy and (5) strongly satisfy.

### *Data Analysis*

The collected data were analyzed using Statistical Package for Social Science (SPSS) version 10.0. Descriptive statistics: The demographic information of the participants and their responses on internship questions were summarized by descriptive statistics. Difference analysis: The difference analysis between training and no training for satisfaction's factors by t-test. Principle component analysis: The 24-item attitude questions were subjected to the principle component analysis with varimax rotation to group the related items into components. The factor loadings, eigenvalues, and percent of variances explained by each component were reported. Only items with factor loadings greater than 0.3 were retained for each factor grouping. Regression analysis: the relationship students' confidence for future career and job satisfaction.

## Results and Discussion

A total of 291 questionnaires were collected. The majority of the students were female (77%). During semester and summer vacation was the major period to intern for students (96.9%). More than half (57.4%) of the respondents reported worked in restaurants and 20.6% of them worked in Hotel. When questioned about the training classes, 62.9% of the respondents showed had trained during internship programs. In terms of personal salary income, most respondents had an income less than NT\$16,000.

These 24 items were seen as the satisfactions that would affect the internship job satisfaction for students for factor analysis. The determinants were factor analyzed using principal component analysis with orthogonal varimax rotation. The number of factors was determined only the factors with an eigenvalue of 1 or higher. The principle component analysis extracted five factors that explained over 64% of the variances (Table 1). The factors were identified and named. The satisfaction factors were: supervisor, environment, learning, administration and relationship. The variances explained by each of the factors were 16.210%, 14.535%, 13.621%, 13.539%, and 5.692%, respectively. Twenty-three items were retained in the process. A Cronbach's alpha test was used to determine the internal consistency of each factors as well as the overall fit. All the coefficients were higher than 0.8 except the one for the fifth factors was 0.61. Relationship and learning emerged as the two most important factors to satisfy during internship for students with the mean scores of 3.73 and 3.43. Administration was the most unsatisfied for students.

Table 1  
Principle Component Analysis of Factors Influencing Students' Internship Satisfaction

Factor	loadings	Eigenvalue	% of variance	Cronbach's Alpha	Mean	SD
Factor 1: Supervisor		8.371	16.210	0.8682	3.43	0.73
Professional knowledge	0.776					
Professional technique	0.744					
Management method	0.695					
Training method	0.677					
Management attitude	0.644					
Factor 2: Environment		2.224	14.535	0.8485	3.39	0.75
Space	0.805					
Air condition	0.785					
Light	0.784					
Equipment	0.724					
Safety	0.601					
Factor 3: Learning		1.618	13.621	0.8296	3.47	0.67
During training	0.778					
Get more technique	0.765					
Pre-training	0.695					
Get more professional skill	0.671					
Get more industry experience	0.584					
Factor 4: Administration		1.536	13.539	0.8252	2.99	0.68
Prepare public for student	0.777					
Internship time	0.728					
Service for student	0.714					
Internship arrange for student	0.694					
Mentor to care student	0.587					
Well-being for student	0.511					
Factor 5: Relationship		1.144	5.692	0.6124	3.73	0.73
Relation with co-work	0.629					
Relation with consumer	0.529					
Total			64.757			
KMO=0.883						

Internships are an important component in hospitality curriculum; most hospitality programs require students to take an internship course before graduation (Petrillose and Montgomery, 1998). All the students felt that internship programs were needed in previous research. Shortt (1992) claims that education in tourism need practical facilities. Gunn (1998) claimed that there was no single education program that could be applied for everyone. Internship programs provided students with needed tools and educate them to take responsibility in future work life (Cheng et al., 2004). They felt that the faculty should assist them and become bridges between students and industry professionals. Industry professionals think that students who have internship experiences are more marketable (Cheng et al., 2004). The results of this study support that internship is an important component of the hospitality curriculum; in addition, students supported and satisfaction. However, the administration would be more systematized and to take care for deal with about students' internship programs. Nelson's (1994) reported that students had higher levels of satisfaction if they had supportive mentors during their internships; regardless of the mentor being assigned or spontaneously formed. Mentors will affect the students'

experiences during internship. Receiving instant feedback from mentors greatly determines if students receive quality internship experiences or not. Students agreed that the internship co-works should be assigned to assist them before and during the internships. Reviewing curriculum on a regular basis, combining information from students, industry professionals, and educators can make the curriculum more practical and suitable in the future. A curriculum focused on integrating preparation for internships during the program is necessary to promote the success of internship programs. School mentor play a very important role in influencing students' filed experiences. Students perceived more successful internship experiences with a mentor relationship. Fu (1999) suggested that supervision is a key factor in determining the success of internship programs. The results of this study showed consistent findings in the importance of supervision during internship programs. Supervision by industry professionals can prevent mistakes from happening.

One of the factors that affect students' choices as to whether or not they work for companies in the future was whether they had participated in an internship with the company before they graduated from college. The least squares regression analysis was to assess the relationship between department variable (the confidence for future career) and several independent variables. Table 2 presents the impact of the five independent variables on the students' confidence for future work. It was observed that two independent variable- learning and administration had beta coefficients that were statistically significant ( $P < 0.05$ ). The t-test was applied to analyze whether there were significant differences in the training classes during internship. As to the statistically significant t-test results, training significantly influenced the students' satisfaction in supervisor and learning factors (Table 3). Training is an important value for students learning. Training as understand for the job- related competencies in order to face the problem in the work. The regression results suggest that learning and administration was very important to the students' confidence for future career. The results might help trainers and managers in different hospitality businesses in developing and designing more efficient human resource strategies. Establishing good training programs for interns, giving intern meaningful tasks, and empowering them to manage the tasks in a more creative way could be solutions to improve future internship programs (Cheng et al., 2004).

Table 2  
Factors Affecting Student's Confidence to Future Career

Variable	Standardized Beta Coefficient	T value	Significance
Supervisor	-0.017	-0.234	0.141
Environment	0.288	3.947	0.815
Learning	0.283	3.575	0.000
Administration	-0.026	-0.335	0.000
Relationship	0.081	0.953	0.738

Note: Multiple  $R = 0.522$ ; adjusted  $R^2 = 0.254$ ;  $F = 14.820$ ; Significance  $F = 0.000$

Table 3  
The Differences Between Training and No Training for The Satisfaction

Job Satisfaction factor	Training	mean	SD	t value
Supervisor	Yes	3.48	0.74	2.017*
	No	3.18	0.66	
Environment	Yes	3.39	0.74	0.276
	No	3.35	0.80	
Learning	Yes	3.51	0.66	2.121*
	No	3.23	0.71	
Administration	Yes	3.01	0.67	1.495
	No	2.82	0.71	
Relationship	Yes	3.76	0.67	1.693
	No	3.53	0.79	

\* $P < 0.05$

## Conclusions

In the last two decades, the tourism industry has seen tremendous growth. With this growth, human resources have become increasingly important as a means of achieving business success. Under-educated labor became a problem in respect of both cost and final product. Student internship in the labor market represents a pool of future employees for the hospitality industry; it makes sense for the industry professionals and academic faculty to access students' attitudes toward internship programs. The students may have positive attitudes toward internship programs and are generally satisfied with their internship experiences, a good portion of them do not necessarily want to work in the hospitality industry. The internship experiences could help them prepare and more confidence for future careers. Students who get hands on experiences from internships will benefit their careers special for the general university students in this case. The following limitations were inherent in the study. First, the study was conducted in general university. To overcome this limitation,

future research findings, and should compare with technical and general university students. Second, the population of this was limited in the north of Taiwan. Therefore, the results from the study may not be generalized beyond this population. Cross lifestyle students' comparison might also be undertaken to reveal if results differ from city to city.

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## Determining Future Fine Dining Intentions

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### Abstract

The purpose of this study is to explore fine dining restaurants' performance factors and their differential effects on behavioral intentions of novice and repeat customers. In addition, a moderating role of self-image for restaurant performance is investigated within the same research framework. Results show that enhanced performance in service and product quality and physical environments increases the customer's perceived performance and behavioral intentions. Understanding the customer's attitudes toward their self-image and past dining experiences may also assist in developing restaurant marketing strategies.

Key Words: restaurant attributes, restaurant performance, self-image, past dining experience, behavioral intentions

### Introduction

This study attempted to examine the process of how customers make their decisions to patronize one restaurant against others, especially in the fine dining segment. The purpose of this study was to explore fine dining restaurants' decision process in consideration of core performance competencies and their effects on customers' behavioral intentions. Different from previous studies, this study examined customers' self-image and past dining experience as meaningful correlates of future dining behaviors within a performance-based prediction framework so as to provide insight into how such extrinsic restaurant performance attributes interacted with intrinsic customer characteristics toward future dining decisions. In sum, this study examines the relationship of product and service quality and physical environment with customers' behavioral intentions (i.e., intention to return and to recommend), the relationship differentiated by repeat (i.e., experienced with the restaurant) and novice (i.e., inexperienced with the restaurant) customers. Within the same framework, overall performance perceptions are modeled to mediate attribute-level performance perceptions toward future behavioral intentions and self-image to moderate overall performance perceptions toward future behavioral intentions.

### Review of Literature

#### *Restaurant Performance Attributes*

According to Arora and Stoner (1996), the quality levels of a service and product are the building blocks of a business culture. Researchers have stressed the importance of food quality, such as taste, flavor, and aroma, and its effect on the customer's decision-making process (Lewis, 1981). Food and beverage are core products offered to customers in the restaurant industry (Clark & Wood, 1999), and the customer's evaluation of product quality bears heavily on his/her satisfaction with the entire experience. Andersson (1992) contends that sating satisfaction needs during service delivery is as important as sating satisfaction with food and beverage, particularly for patrons of fine-dining restaurants (Lee & Hing, 1995). Zeithaml et al. (1996) assert that improvement in service quality enhances customers' returns and potentially decreases unfavorable behavioral outcomes.

Several studies indicate that the physical environment created by the restaurant is one such a factor positively affecting customer perceptions of restaurant performance, especially in fine dining and theme restaurants. Kotler (1973) refers to atmosphere as the ambient dimension that covers all the "background" stimuli in a store environment. This concept is further convoluted by Bitner's (1992) postulation of "servicescapes" that emphasized the criticality of providing attractive store environments for inducing customer satisfaction and loyalty over time. Foxall and Greenley (1999) assert that the environment, ambiance, and other similar physical environment components influence consumer perceptions of the business. Robson (1999) emphasizes that customers should be able to form expectations about their dining experience from the target restaurant's physical environment. Studies show that elements of a physical environment (e.g., including color, interior design, aroma, music, lighting, artwork, etc.) have significant effects on the customer's emotional states that may lead to enhanced, positive behavioral intentions.

### *Performance and Behavioral Intentions*

Perceived performance, defined as overall excellence of a product, is subjective evaluations made by the customer after a service encounter and is a summary judgment of a consumption experience (Yüksel & Rimmington, 1998). Accordingly, the customer's perceived performance of a restaurant could be a more pragmatic way to measure their dining experience when it is based upon an array of attributes including, for example, food and service. Restaurants' success is contingent on providing their customers with the products and services that elicit customer loyalty. Zeithaml et al. (1996) refer to intention to return as an intention of whether the customer will remain with or defect the company. Overall, customers generally perceive a high level of value and satisfaction when they perceive a high level of product or service quality, which consequently promotes the customer's intention to return and to recommend (Oh, 2000).

### *Self-Image*

This study proposes that the customer's self-image moderates the relationship between the overall performance perceptions and behavioral intentions in the restaurant evaluation process. Self-image has been defined as "the totality of the individual's thoughts and feelings having reference to himself as an object" (Rosenberg, 1979, p. 7) and it has been used extensively as a "cognitive referent" in analyzing social symbolic cues. Sirgy (1982) suggests that consumers maintain a positive self-image by purchasing products that are congruent with their image. Bitner (1992) insists that individuals express themselves by choosing brands whose personalities are perceived to be similar with their own personalities, which tend to moderate the relation between behavioral variables. In a restaurant context, the perception of oneself may be closely related to one's personality since the customer tends to patronize restaurants whose personalities closely correspond to his/her self-image. Therefore, this study proposes that self-image with a fine dining restaurant, where customer may give more weight to symbolic benefits of restaurant performance attributes than those in lower segments, could be prevailing personal variable that moderates the relationship between perceived overall performance and future behavioral intentions.

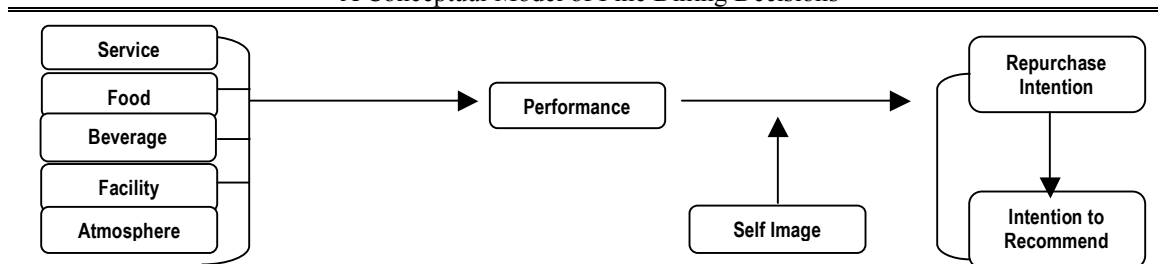
### *Past Experience*

Experienced consumers process information and evaluate products differently, compared to novice consumers. Experienced consumers can develop strong knowledge structures about the focal product as they become more familiar and, therefore, their liking of the product is likely to be well established and stable (Rao & Monroe, 1988). In view of that, past dining experience could be a significant intrinsic customer characteristic toward future dining decisions in a restaurant context. Customers who have a previous experience with the restaurant can effectively generate information about various evaluative attributes of the restaurant. On the contrary, novice customers have a relatively undeveloped processing schema for evaluating the restaurant, which makes the evaluation process more difficult. Previous studies insist that repeated restaurant customers perceive quality, value, and satisfaction based on a variety of product and service attributes and form revised expectations derived from their previous experience (Oh, 2000; Yüksel & Rimmington, 1998). Thus, we expect similar effects of past experience on future dining decisions for fine dining customers in our present study.

### **Methodology**

This study was based on a survey with the self-administered questionnaire and a mixed procedure of random and convenience sampling was used at two fine dining restaurants in a medium-sized United State city. The conceptual model (See Figure 1) of this study includes the effects of service, food, beverage, atmosphere, and facility on perceived overall performance. Repurchase intention and intention to recommend are modeled as a direct consequence of perceived overall performance. The model incorporates a moderating role of self-image between perceived performance and behavioral intentions. In addition, the effects were examined separately for the customers who were either repeat or novice customers. Reviews of related studies provided thirty measurement items for this study (See Table 1). All variables were measured each with multiple items, except perceived overall performance, repurchase intention, and intention to recommend.

Figure 1.  
A Conceptual Model of Fine Dining Decisions



## Results

Of the total of 200 questionnaires personally distributed, 191 were gathered yielding a 96% response rate. Customers from both restaurants reported favorable overall performance (mean= 4.69). The mean of return intention at both restaurants was 4.58 (SD = 0.05). A larger proportion of the respondents had a previous dining experience in the sample restaurant (61.1%). Factor analysis with a varimax rotation summarized the twenty-seven attributes into six factors (See Table 1), which were consistent as expected based upon the nature of the measurement items. While the first factor, SERVICE, consisted of eight service related items, the fourth (FOOD) and the fifth factors (BEVERAGE) resulted from food-related items and beverage-related items, respectively. The physical environment items were reduced to the third (ATMOSPHERE) and sixth (FACILITY) factors. The four self-image items reduced to a SELF IMAGE factor. The Cronbach's alpha of reliability ranged from .61 to .94, indicating that the derived within-factor measurement items were internally reliable in most cases.

Table 1.  
Factor Analysis Results

Factors	Service	Self Image	Atmosphere	Food	Beverage	Facility
Reliability	(.93)	(.94)	(.82)	(.80)	(.81)	(.61)
Measurement Items (Factor loadings)	Timeliness of service (.810)	how I see myself (.891)	Color of physical setting (.721)	Flavor of food (.749)	Variety of beverage (.762)	Bathroom facilities (.735)
	Friendliness of service (.777)	how I like to see myself (.894)	Lighting (.781)	Aroma of food (.797)	Quality of beverage (.787)	Exterior / parking lot (.625)
	Knowledge of server (.765)	how I believe others see me (.923)	Table setting (.695)	Color of food (.589)	Amount of beverage (.778)	
	Entertaining service (.670)	how I would like others to see me (.902)	Music (.730)	Texture of food (.600)		
	Well-groomed service (.739)		Artwork / ambiance (.635)			
	Attentive service (.902)		Flowers / plant-life (.584)			
	Careful service (.853)					
	Willing to meet needs (.912)					
Eigenvalue	8.694	3.394	2.761	1.768	1.349	1.083

Note: All items were measured with a five-point Likert scale ranged from (1) strongly disagree to (5) strongly agree

A series of regressions analysis were conducted to analyze the conceptual model (See Table 2), following the procedures proposed by Baron and Kenny (1986). For the novice customer group, 'beverage' significantly affected perceived 'performance' in Model 1 ( $R^2 = 0.55$ ). As shown in Model 2 ( $R^2 = 0.55$ ), the positive effect of the beverage and negative effect of the facility factors on repurchase intention (Model 2) were completely mediated by overall performance as shown in Model 3 ( $R^2 = 0.78$ ). The interaction effect (i.e., moderation) of the self-image factor on repurchase intention was also significant for novice customers (Model 3). As shown in Model 4 ( $R^2 = 0.56$ ), the food and the beverage factors significantly affected novice customers' intention to recommend, the effect of which was completely mediated by overall performance as revealed in Model 5 ( $R^2 = 0.73$ ). Besides its moderating effect on repurchase intention shown in Model 3, the self-image factor had a significant main effect on novice customers' intention to recommend (see Model 5). The results of Model 6 ( $R^2 = 0.82$ ) revealed that whereas the effect of overall performance on intention to recommend was mediated by repurchase intention, the main effect of the self-image factor remained significant.

Table 2.  
Regression Analysis Results

Independent Variable	Novice Customers			Repeat Customers		
	Std. Coefficient	t Value	VIF <sup>c</sup>	Std. Coefficient	t Value	VIF <sup>c</sup>
<u>Performance</u> <sup>b</sup> (Model 1)						
Service	.267	1.515	2.453	.405	4.269*	1.190
Food	.061	.418	1.679	-.019	-.171	1.611
Beverage	.379	2.641**	1.633	.171	1.596	1.521
Facility	-.041	-.290	1.569	.095	.873	1.561
Atmosphere	.243	1.597	1.835	.122	1.194	1.386
	$R^2 = .546^a$			$R^2 = .318^a$		
<u>Repurchase Intention</u> <sup>b</sup> (Model 2)						
Service	.348	1.982	2.453	.259	2.538**	1.190
Food	.309	2.126**	1.679	-.131	-1.101	1.611
Beverage	.248	1.727	1.633	.206	1.784	1.521
Facility	-.300	-2.132**	1.569	.140	1.193	1.561
Atmosphere	.137	.900	1.835	.144	1.309	1.386
	$R^2 = .547^a$			$R^2 = .211^a$		
<u>Repurchase Intention</u> <sup>b</sup> (Model 3)						
Service	.291	2.028	2.762	-.046	-.484	1.529
Food	.165	1.384	1.919	-.111	-1.132	1.594
Beverage	-.138	-1.068	2.251	.117	1.212	1.558
Facility	-.144	-1.271	1.730	.069	.708	1.595
Atmosphere	-.002	-.016	1.948	-.044	-.429	1.726
Performance	.345	2.350**	2.894	.609	5.485*	2.059
Self Image	.120	1.290	1.159	.307	3.223*	1.517
Performance x Self Image	.390	3.101*	2.131	-.145	-1.477	1.605
	$R^2 = .777^a$			$R^2 = .496^a$		
<u>Intention to Recommend</u> <sup>b</sup> (Model 4)						
Service	.156	.903	2.453	.329	3.284*	1.190
Food	.290	2.029**	1.679	-.109	-.933	1.611
Beverage	.327	2.314**	1.633	.154	1.357	1.521
Facility	-.155	-1.122	1.569	.193	1.680	1.561
Atmosphere	.298	1.993	1.835	.094	.873	1.386
	$R^2 = .561^a$			$R^2 = .240^a$		
<u>Intention to Recommend</u> <sup>b</sup> (Model 5)						
Service	.044	.278	2.762	.068	.688	1.529
Food	.185	1.408	1.919	-.117	-1.153	1.594
Beverage	.053	.370	2.251	.084	.836	1.558
Facility	-.059	-.470	1.730	.122	1.205	1.595
Atmosphere	.206	1.556	1.948	-.001	-.007	1.726
Performance	.497	3.080*	2.894	.584	5.069*	2.059
Self Image	.268	2.623**	1.159	.114	1.156	1.517
Performance x Self Image	.023	.168	2.131	-.079	-.779	1.605
	$R^2 = .730^a$			$R^2 = .458^a$		
<u>Intention to Recommend</u> <sup>b</sup> (Model 6)						
Service	-.138	-.983	3.141	.095	1.138	1.533
Food	.082	.719	2.041	-.054	-.625	1.618
Beverage	.139	1.147	2.336	.017	.196	1.586
Facility	.032	.294	1.823	.083	.968	1.604
Atmosphere	.207	1.871	1.948	.024	.274	1.730
Performance	.281	1.915	3.426	.235	2.087*	2.797
Self Image	.193	2.199**	1.223	-.062	-.702	1.704
Performance x Self Image	-.221	-1.662	2.814	.004	.043	1.646
Repurchase Intention	.626	3.727*	4.483	.573	6.038*	1.986
	$R^2 = .817^a$			$R^2 = .623^a$		

a.  $F < .01$  / b. Dependent Variables / c. Variance inflation factor / \*  $p < .01$  \*\* $p < .05$ .

For the repeat customer group, the service factor appeared to have a significant effect on perceived overall performance (Model 1,  $R^2 = 0.32$ ). As shown in Model 2 ( $R^2 = 0.21$ ), the service factor was the only significant variable influencing repurchase intention and its effect was mediated by overall performance as summarized in Model 3 of Table 2 ( $R^2 = 0.50$ ). Moreover, the self-image factor had a main significant effect on repurchase intention but did not moderate the effect of overall performance on repurchase intention. Similarly, only the service factor remained significant affecting intention to recommend (Model 4,  $R^2 = 0.24$ ) and its effect was completely mediated by overall performance as shown in Model 5 ( $R^2 = 0.46$ ). Model 6 ( $R^2 = 0.62$ ) showed that overall performance and repurchase intention both played significant roles in shaping repeat customers' intention to recommend the restaurant.

### Discussion and Conclusion

The exploratory findings of this research propose a few precursors that affect customer's behavioral intentions in a fine dining context. In summary, our study shows beyond what previous studies have reported: (1) fine dining restaurant operations could be effectively evaluated in five distinct dimensions, as indicated by strong  $R^2$ s of the regression models; (2) customers' past dining experience and self-image are the variables that should be seriously considered when developing restaurant marketing strategies; and (3) restaurant performance had different implications for repurchase intention and intention to recommend.

The findings suggest that novice customers evaluate a fine dining experience differently than repeat customers. Novice customers tend to evaluate a restaurant based on the food, beverage, and facility factors that are rather tangible in nature. This indicates that novice customers tend to rely on concrete, vivid cues to judge restaurant performance. This is perhaps because novice customers do not have a firmly established schema for the evaluation object and, therefore, have few accessible attributes in memory to evaluate their dining experience. On the other hand, an effective meaningful service is potentially a conduit to behavioral intentions for repeat customers. Different from novice customers, repeat customers tend to have higher levels of familiarity and knowledge structures, which may enable them to evaluate their dining experience using less concrete, but more psychological attributes such as service. In addition, overall performance and return intention both had significant effects on word-of-mouth intention for repeat customers.

The results also revealed an important role of self-image in the fine dining evaluation process, especially with regard to past dining experience. Management can potentially adopt policies that direct the efforts of the wait-staff toward furthering the congruence of the customers' self-image and prior dining experiences. The results for the novice customer group in Model 3 showed that overall restaurant performance and the moderator effect of self-image positively affected novice customers' repurchase intention. It is noticeable that the standardized coefficient of the moderation effect (.39) was larger than the main effect of overall performance (.35). On the other hand, self-image had no main effect on return intention, indicating that, although self-image did not have a main effect on repurchase intention, the effect of perceived overall performance on repurchase intention seems to be stronger for the customers whose self-image was rated to be consistent with the restaurant image. In addition, both novice and repeat customers develop stronger intention to recommend the restaurant to others when they have higher intention to repurchase. As shown in Model 6 for novice customers, while the standardized coefficient (.63) of repurchase intention was the largest, self-image still exerted a significant direct effect (.19) on intention to recommend. On the contrary, the self-image results for the repeat customers group were different from those for novice customers. The standardized coefficients in Model 3 indicate that overall performance had a much greater effect on repurchase intention for repeat customers (.61) than for novice customers (.35). In addition, the main effect of self-image had a large standardized coefficient (.31).

Although the nature of this study was somewhat exploratory, this research may provide a foundation for taking several directions in future research. First, the self-image results, in particular, communicate a need for management to further explore customer perceptions of how they see themselves with regard to fine dining activities. Future studies might need to measure the single-item variables of this study with well-operationalized multiple items. Inclusion of the other variables (e.g., customer value, price, perceived risk, and dining occasions) that may explain the customer's fine dining evaluation process may be necessary. Finally, the concepts of past experience and perceived self-image dictate further investigations in hospitality research, in general, because of their seemingly important roles in the consumer decision-making process, as partly shown in this study.

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## Process of Developing Hospitality Web Applications Utilizing XML, SQL, and CRM Solutions

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### Abstract

The purpose of this study is to discuss the technical processes behind a Web-based customer relationship management (CRM) application for the hotel industry that include CRM, XML, and SQL in building advanced Web based customer service.

Key Words: web applications, XML, SQL, Database, CRM applications

### Introduction

The reality of building IT architecture to support technology-dependent customer service such as CRM (customer relationship management) is complex, demanding, and yet critical to the hospitality industry given the ever-developing nature of the technology. Further, technology design and engineering will require systematic planning and process design to meet the needs of customers and company. To fully understand the impact of technology and the Internet utilization on the hospitality organization, the management and the researchers need to grasp the critical technologies that impact and support business decisions and activities. These technologies may include networking, the Internet, sales and marketing automation, and CRM. In spite of the rise of technology to improve customer service, there has been virtually no report on how to technically present technical CRM solutions in hotel industry. Thus, the objective of this project is to present how XML and SQL integrate into CRM applications.

### Literature Review

Increasingly, new information system applications will be built and marketing services will be delivered using Web services. Web services are software components deliverable over the Internet that enable one application to communicate with another with no translation required. Recently, increasing number of Application Service Provider (ASP)s has brought new business solutions, such as SQL Server (designed for complicated processes and heavier traffic) and Microsoft's premier relational database management system (RDBMS), when the hotel company phases out the existing FoxPro systems. For instance, an ASP serving hotel industry introduces a Web-based customer relationship management (CRM) application, called Web Concierge, to some of the high-end clients across the country. This CRM program, as will be explained in detail later on, allows the property to enhance the guest experience by gathering information directly from the guest that cannot be located or purchased from any other source. This information is based on the preferences of the guests and attempts to match these wishes to the services the hotel has to offer. The last decade has witnessed the surge of B2C (Business to Consumer) E – Commerce. The core of any successful E-enterprise is customer relationship management (CRM): CRM describes the methodologies, software, and Internet capabilities of an organization in order to manage and enhance the customer experience. In order words, the goal of CRM is to facilitate customer loyalty by providing real time, accurate, and effective communication of service information and transaction solutions to each clients. The purpose of the organization will determine what aspects of CRM will be the focal point for their e-commerce strategy (Harney, 2002). In general, a great website must be able to accurately provide the information desired in a minimal amount of time. Companies who strive to make everything easier for the consumer will be noticed (Roth, 2000).

The key technology behind CRM is programming languages (i.e., XML and SQL) which enable the Internet to present information on the Web page. To understand XML or Extensible Markup Language, it is useful to first understand the basic concept of HTML. HTML or Hypertext Markup Language is a programming language used to display information on the Internet: a predefined set of markup language uses tags to describe how to display uniform interpretation of data across various Web browsers. On the other hand, XML simply stated adds context to content. Rather than defining the way a document will appear visually, as with HTML, XML allows the programmer to attach meaning to the information it describes. The language is referred to as extensible due to the flexible nature of the markup tags used. In the case of XML, these tags may add meaning to the data being displayed. Tags or element descriptors surround information in XML, HTML, and other markup languages to describe how data should be displayed or to add meaning to the data being displayed. A common misconception of XML is that it will replace HTML. The two languages, while similar in appearance and often appearing together in a Web document, accomplish two different tasks. XML is a flexible language, meaning the tags used are not predefined by a standard such as those used in HTML. This allows the programmer to attach meaning to the information described by the tags. XHTML is the fusion of HTML and XML in a Web document to display meaningful information (Morrison, 2001). As with many technical explanations, this is best seen by an example.

Here is a simplified XHTML document, as it would be displayed in a Web browser.

Customer Number	Customer Name	Contact Name
05201	IDT Hospitality Group	Charles Allen
23896	Marriott International	William Marriott Jr.

This is the XHTML code which actually represents the table:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1/0 Transitional??EN"
"DTD/sjt;1-transitional.dtd">
<html xmlns="http://www.idthospitality.com/xhtml">
<html>
<head><title>Customers</title></head>
<body>
<customertable>
<tablerow1>
<tablehead1>Customer Number</tablehead1>
<tablehead2>Customer Name</tablehead2>
<tablehead3>Contact Name</tablehead3>
</tablerow1>
<tablerow2>
<customernumber>05201</customernumber>
<customername>IDT Hospitality Group</customername>
<contactname>Charles Allen</contactname>
</tablerow2>
<tablerow3>
<customernumber>23896</customernumber>
<customername>Marriott International</customername>
<contactname>William Marriott Jr.</contactname>
</tablerow3>
</customertable>
</body>
</html>
```

Structured Query Language (SQL) is the language used by relational database management systems (RDBMS) to query data. The language is used by SQL programs, such as Microsoft SQL Server 2000 or Oracle, for interactive modification of data and for gathering data for reporting (Electronic References, 2002). SQL is a standard programming language used to update, locate, insert, delete, select, or otherwise modify data in database. This paper focuses specifically on Microsoft's SQL Server 2000 and, while all SQL is similar, it is important to note that each SQL program may differ slightly to accommodate and compliment the unique features of each program. Here are the results of the simple SQL query written below as they would appear in the results pain of Query Analyzer. Query Analyzer, while not the only way to interact with SQL Server, has many features making it one of the most user-friendly interfaces.

This query would return this information in the results frame of Query Analyzer.

Customer Number	Customer Name	Contact Name
05201	IDT Hospitality Group	Charles Allen
23896	Marriott International	William Marriott Jr.

Here is an example of a simple SQL query.

```
SELECT CustomerNumber AS 'Customer Number',
CustomerName AS 'Customer Name',
```



```
ContactName AS 'Contact Name'
FROM Customers
WHERE CustomerNumber = '05201' OR '23896'
```

An interesting feature of SQL Server 2000 for XML applications is the concept of a URL-based query, an optional feature of SQL Server defined in HTTP access (Vieira, 2000). A URL is a uniform resource locator, generally known as the Website address. A URL-based query is typed directly into the address bar of the Internet browser. For example, the previous SQL query could be written like this:

```
http://localhost/IDTHospitality?SQL=SELECT+Customers.CustomerNumber+AS+'Customer+Number',+Customers.Cust
omerName+AS+'Customer+Name',+Customers.ContactName+AS+'Contact+Name'+FROM+Customers+WHERE+Custo
mers.CustomerNumber+=+'05201'+OR+'23896'+FOR+XML+RAW&root=ROOT
```

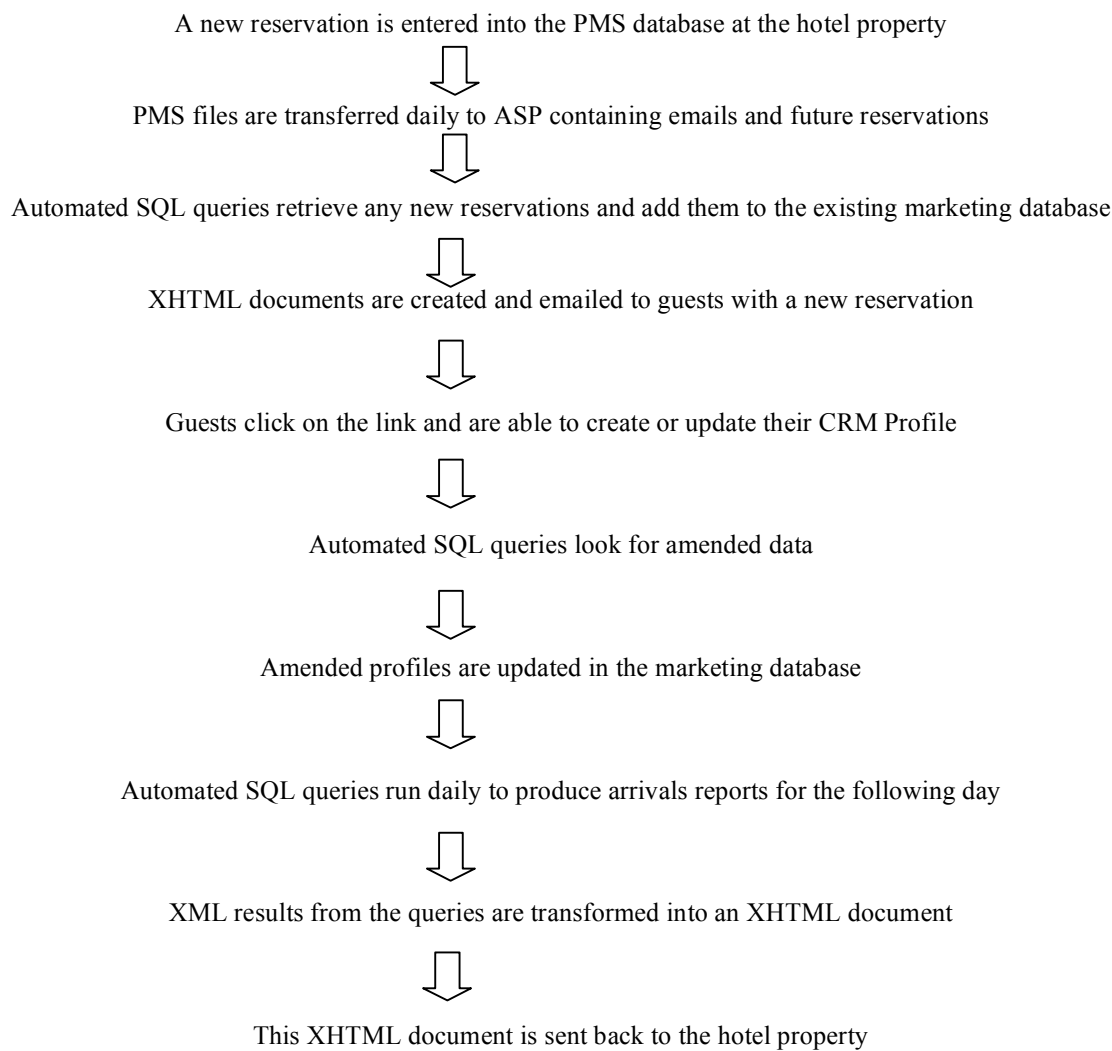
At first glance, this seems quite complex, but upon further inspection, the reader will see the same query has been written out with a + in the place of each empty space. This will return the same result set written in XML to Internet Explorer (or any other appropriately enabled Web browser).

CRM (Customer Relationship Management) is a concept based on how to build customer loyalty. Recent technology has paved the way for faceless transactions and a multitude of options for customers. In order to retain customers for repeat business in this atmosphere, an organization must stand out by adopting aggressive CRM strategies. The backbone of any strategy is to provide accurate and timely information in a user-friendly format. While the concept is not new, the tools used to leverage effective CRM have advanced significantly in recent years, in reference to web applications and the databases that drive them (Dietz, 2002). In order to develop a complete understanding of a hotel guest, a hotel company must gather all guest information in a database and leverage that data with other sources to make it more meaningful. SQL is perfect for adding information to these databases and retrieving the information needed for a particular marketing campaign or related effort. However, SQL interfaces can be somewhat complicated and daunting to novice and intermediate computer users. XML technology allows the retrieval of this information from a database, with automated processes, and transforms it into an HTML format, which can be viewed on any machine with a Web browser. Data becomes portable and readily available to management, employees, and even the guest, thus ensuring the most accurate information possible. The following flow chart on Figure 1 illustrates how to integrate SQL and XML into CRM solutions.

In order to create a third-party CRM application for a hotel, ASP needed to fill information needs not currently satisfied by the Property Management System (PMS). The PMS provides historical data on past guests. This information includes total revenue, room revenue, food and beverage revenue, other revenue, method of payment, number of guests, telephone numbers, fax number, some email addresses, mailing addresses, presence of children, and many other facts regarding the guest's stay. Unfortunately, this information only provides a partial view of the guest. ASP collects and compiles this information in a database in an effort to build an historical profile of the guest based on past stays. This information is then matched against national databases storing demographic information and other sources of marketing information. By matching addresses from the PMS to the other databases, ASP is able to build a more robust profile of each guest.

As indicated on Figure 1, the essential step towards building a complete CRM solution is to collect the information only the guest can provide. The ASP vendor works with the hotel property to develop a list of all possible services and preferences the hotel has available and will be able to provide to guests. Finally, the guest can create multiple profiles to characterize different stays such as those for business and leisure. When a guest makes a reservation for a future date, they are asked to provide an email address. If this information is supplied or already exists within the system at the time of reservation, an email is sent to the client. If the guest has already created a profile, the email holds a link to the system and to the guest current profile. This allows the guest to amend any preferences for the future stay and cancel any requests which are no longer applicable. If the guest has not yet created a profile, a demographic profile is created for them from the reservation information and an email is sent with a link to the system asking that the guest provide any room or stay preferences. In order for this to application to produce the desired results, the hotel sends the vendor a daily file with information regarding future reservations made that day. The ASP vendor then updates the database and returns a file with information regarding the guests arriving the following day. This detailed arrivals report includes the guests three most recent stays and a short summary of all past stays. Additionally, the report states any preferences or requests made by the guest through the system. The hotel uses this report to prepare for the guest's arrival.

Figure 1.  
Integration of SQL and XML into CRM Flow Chart



### Managerial Implications and Research Suggestions

CRM is not an application for every hotel. The resources required to maintain the application and respond to the guests' requests are substantial. By offering an application like this, a property has committed itself to providing all of the services displayed on the site. This level of service is only available at large upscale hotel and resort properties with high levels of customer service. Additionally, transient hotels would not likely see the benefit as the system, like any CRM strategy is a relationship with the customer which is build over time. Lodging companies have limited information on how their websites are performing. Those who are aware of the need for highly scalable websites are forced to use data from other industries. However, due to the unique nature of service provided on the lodging websites, future research should focus on how to improve online CRM service and measure the effectiveness of CRM service. As Cotter (2002) stated, the biggest problem in e-commerce is the lack of analysis to understand the users' perception of the CRM effectiveness. This means the door remains open for innovative hotel owners and hospitality researchers to leapfrog e-competition by understanding and mastering online CRM business (Watkins, 2000).

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## Investigation of online travel community members' interaction and identification

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### Abstract

Given the demonstrated crucial importance of online community in the travel market, this study explored member interaction activities in the online travel community. Study results showed that (1) three proposed antecedents (travel involvement, social affiliation, and community benefits) of member participation were all found to be significant factors that drive people into online community activities; (2) members' frequent interactions with other members strengthen their sense of belonging to a particular online travel community; and (3) the relationship between community benefits and community interaction differs with respect to a member's level of observation frequency.

**Key Words:** Online travel community, Interaction and identification, Observation frequency

### Introduction

With the increasing popularity of online communities, many travel businesses have widely focused on managing an online community in which people interact around a shared interest in travel (Kim, Lee, & Hiemstra, 2004; Wang & Fesenmaier, 2004). In fact, some travel companies such as Travelocity ([www.travelocity.com](http://www.travelocity.com)) and Easyjet ([www.easyjet.com](http://www.easyjet.com)) have provided frequent travelers/flyers with a platform to share their travel tips and experiences with hotels, travel destinations, air flights, restaurants, and travel packages (Hagel, 1999; Wang & Fesenmaier, 2004). Well-established online travel communities serve as a useful tool in collecting customers' preferences and affecting online members' behaviors. Online travel community marketers can also influence members' decision-making process, because online travel community members are more flexible to modify their behaviors in relation to the value of their community.

Yet in spite of such a proliferation of online travel communities, little is known about (1) what factors encourage travelers to interact with other members in the community; and (2) what the result can be expected as a result of members' frequent interaction with other travel members. Therefore, this study aims to identify important factors influencing online travel community members to interact with other members around their shared interests. This study further investigates how the positive effects of proposed antecedents on community interaction activities are influenced by the strength of online member's observation frequency referring to lurking frequency, given that members with frequent observation are more inclined to communicate around their shared interest (Okleshen & Grossbart, 1998; Ridings & Gefen, 2004). Travel businesses can make more successful marketing decisions in managing online communities through a better understanding of members' interaction activities in the online travel community. A better knowledge of travel members' community activities thus empowers community service providers to develop a sustainable competitive edge over others.

### Literature review

#### *Community Interaction and Identification*

Community interaction refers to the degree to which members participate in ongoing communication by sharing common interests. A number of studies on online communities regarded members' active interaction with other members in the communities as desirable (i.e., Ridings, Gefen, 2004; Wang & Fesenmaier, 2004). It could be argued, that given the fact that members voluntarily participate in the community, the online community can not survive without members' active interaction with other members (Wang & Fesenmaier, 2004). Consequently, such increased interaction activities enables members to identify themselves as a member of the online community (Okleshen & Grossbart, 1998). Community identification can be defined as the perceived sense of belonging to a particular online travel community. Although various definitions of identification have been made during the past decades, it is generally accepted that identification is (1) a process of self-categorization (Carlson, 2005); and (2) an aspect of psychological attachment to a particular organization (Dutton, Dukerich, & Harquail, 1994).

This study views community interaction and community identification as two important elements in apprehending members' activities of online travel community. It has been found that a member's sense of affective identification with the online community is achieved through the interactive communication around shared interests (Kim et al., 2004; Wang

& Fesenmaier, 2004). Members' involvement with travel, social affiliation, and community benefits are proposed as antecedents of community interaction, which leads to community identification.

### *Factors Affecting Online Community Interaction Behavior*

#### Travel Involvement

Travel involvement is herein defined as a person's perceived relevance and interest to a travel and tourism based on inherent needs and values. The central premise of the involvement research is that, according to a different object or activity, an individual's perceived relevance would vary (Cho, 2003; Gursory & McCleary, 2004). More specifically, as a person's involvement level increases, they are more inclined to have positive attitudes and decision-making paradigms due to their increased interest in the object (Koufaris, 2002).

#### Social Affiliation

For this study, social affiliation is described as a person's tendency to develop and maintain relationships with other members. A person's social affiliation need has long been viewed as a personality trait and individual differences, suggesting that the level of need for social affiliation varies across people (Hill, 1987). Some people are more interested in interpersonal relationships, while others enjoy being alone. In contrast to people with low affiliation need, highly sociable people are more apt to (1) develop interpersonal relationships (Mathwick, 2002); (2) spend time interacting with others (Wong & Csikszentmihalyi, 1991); and (3) desire long-term relationships (Bendapudi & Berry, 1997).

#### Community Benefits

Customers generally anticipate various benefits from participation in a certain community as a member (Srinivasan, Anderson, & Ponnnavolu, 2002; Wang & Fesenmaier, 2004). The greater participants view community services as valuable, the more likely they are to modify their attitudes and behaviors based on the perceived benefits. In this study, community benefits are conceptualized as the degree to which community services are perceived as being valuable and superior to those of available alternatives.

#### *Observation Frequency*

Observation frequency is conceptualized herein as the degree to which members visit online communities and never contribute to ongoing conversations. Newcomers who passively observe the community activities without participating, become more frequent participants as they feel more comfortable in a chosen travel community (McWilliam, 2000). This means that frequent observers are more receptive to the community value and are more prone to give priority to the value of their community. It is thus clear that online travel members with frequent observation are more likely to interact with other travel members, since they can more accurately assess the community service (Bendapudi & Berry, 1997).

### **Hypotheses**

Drawing upon the extensive previous studies, the following hypotheses are first suggested.

- H1: *Higher levels of travel involvement will lead to higher levels of community interaction.*
- H2: *Higher levels of social affiliation will lead to higher levels of community interaction.*
- H3: *Higher levels of community benefits will lead to higher levels of community interaction.*
- H4: *Higher levels of community interaction will lead to higher levels of community identification.*

Some recent studies also suggested that more frequent observers are more receptive to the community value and are more prone to give priority to the value of their community (McWilliam, 2000; Okleshen & Grossbart, 1998). Online travel members with frequent observation are more likely to interact with other travel members, because they can better evaluate the community service (Bendapudi & Berry, 1997). Thus, online traveler's observation frequency is hypothesized to strengthen the effects of travel involvement, social affiliation, and community benefits on interaction activities. The related hypotheses are as follows:

- H5: *The positive influence of travel involvement on community interaction will be greater among those with more frequent observation than among those with less frequent observation.*
- H6: *The positive influence of social affiliation on community interaction will be greater among those with more frequent observation than among those with less frequent observation.*
- H7: *The positive influence of community benefits on community interaction will be greater among those with more frequent observation than among those with less frequent observation.*

## Methodology

Based on a comprehensive review of previous research, an instrument was developed. All of the measurement items were measured using a five point Likert scale, with 1 being strongly disagree to 5 being strongly agree. A convenience sampling procedure including 94 highly active travel-related groups were adopted in this study based on their activity level provided by MSN. A total of 384 community members from 37 travel-related communities responded to the survey. Of these, 32 were eliminated due to incomplete responses, resulting in a usable sample of 352 responses.

Structural equation modeling (SEM) was used to test the proposed hypotheses. Specifically, the measurement model was first estimated and the measurement and structural model were then estimated simultaneously (Anderson & Gerbing, 1988). The existence of moderating effects was estimated by a multigroup approach (Jöreskog & Sörbom, 1993).

## Results

### Measurement Model

The adequacy of the measurement component of the proposed model was first examined by performing confirmatory factor analysis. Model fit for the measurement model was good ( $\chi^2 = 360.73$ ,  $df = 123$ ,  $p < .001$ ; comparative fit index [CFI] = .97; goodness-of-fit index [GFI] = .90; standardized root mean residual [SRMR] = .052; normed fit index [NFI] = .96; Tucker-Lewis index [TLI] = .96). Because the proposed measurement model achieved an acceptable fit, each of the constructs was evaluated by (1) examining the statistical significance of each estimated loading and (2) assessing the reliability coefficients of the studied constructs. Significant factor loadings for a specified construct provide evidence of convergent validity, suggesting that items for valid measures of the same concept are at least moderately correlated among themselves. All indicators loaded significantly on their specified construct with the lowest  $t$ -value being 12.97 ( $p < .001$ ), which suggests that the specified indicators are sufficient in their representation of the constructs (Hair, Anderson, Tatham, & Black, 1998).

The construct's reliability for each construct was then assessed. An examination of construct's reliability indicated that the  $\alpha$ s were all above Nunnally's (1978) recommended .70 threshold. The composite reliability indices ( $\rho_c$ ) of each scale were all greater than Bagozzi's (1980) recommended level of .70 and all variance-extracted scores ( $\rho_v$ ) were also .51 or higher and exceeded the .50 cutoff recommended by Fornell and Larcker (1981), which suggests that the measures are internally consistent.

### Structural Model

The model achieved a good level of fit:  $\chi^2 = 378.02$ ,  $df = 125$ ,  $p < .001$ ; CFI = .97; GFI = .90; SRMR = .060; NFI = .96; TLI = .96. As was expected, all structural path estimates were significant. The signs of all structural paths were also consistent with the hypothesized relationships among the latent variables. H1, H2, and H3 postulated the positive relationships between three proposed factors and community interaction. Travel involvement (standardized  $\gamma_{11} = .22$ ,  $p < .001$ ), social affiliation (standardized  $\gamma_{12} = .26$ ,  $p < .001$ ), and community benefits (standardized  $\gamma_{13} = .40$ ,  $p < .001$ ), all had significant effects on community interaction. Thus, all three hypothesized relationships (H1, H2, and H3) were confirmed by the data. H4 posited the positive relationship between community interaction and community identification. Community interaction (standardized  $\beta_{21} = .80$ ,  $p < .001$ ) had significant effect on community identification. Thus, H4 was also supported.

### Moderation Tests

The sample was split at the mean of member's observation frequency level to form two subgroups that represent low and high observation frequency groups. This gives 177 cases in the low groups and 175 cases in the high group. To assess how some of the hypothesized relationships vary according to member's observation frequency level, two subgroup models were tested and compared. More specifically, the baseline model in which all hypothesized structural paths are allowed to vary across the low and high observation frequency subgroups was first estimated, and the constrained model in

Table 1  
Results of a Series of Chi-square Difference Tests

Model	Chi-square Statistic	Testing Equality of Slope
$M_f$ : Free Model	$\chi^2(273) = 939.82$ , $p < .001$	
$M_{c1}$ : Travel Involvement <sup>a</sup> Community Interaction	$\chi^2(274) = 940.66$ , $p < .001$	$M_{c1} - M_f$ $\Delta\chi^2 = .84$ , $df = 1$ , n.s.
$M_{c2}$ : Social Affiliation <sup>a</sup> Community Interaction	$\chi^2(274) = 943.29$ , $p < .001$	$M_{c2} - M_f$ $\Delta\chi^2 = 3.47$ , $df = 1$ , n.s.
$M_{c3}$ : Community Benefits <sup>a</sup> Community Interaction	$\chi^2(274) = 946.00$ , $p < .001$	$M_{c3} - M_f$ $\Delta\chi^2 = 6.18$ , $df = 1$ , $p < .05$

<sup>a</sup>: The path was constrained to be equal across the two groups.

n.s. = non-significant

which only the hypothesized structural paths are constrained to be equal across the two subgroups were compared (Jöreskog & Sörbom, 1993). Because the two models are nested, the resulting one degree of freedom  $\chi^2$  difference test provides a statistical test for moderating effect of observation frequency. A significant chi-square difference suggests that the equality constraints are not consistent with the data, and thus that a moderating effect exists (Jöreskog & Sörbom, 1993).

The results show that the effects of travel involvement and social affiliation on community interaction did not differ across the two subgroups ( $\Delta\chi^2 = .84$ ,  $df = 1$ , n.s.;  $\Delta\chi^2 = 3.47$ ,  $df = 1$ , n.s.), thus not supporting H5 and H6 (See Table 1). More specifically, Table 2 shows that the slope of the high observation frequency group ( $\gamma_{\text{High}} = .26$ ) and low observation frequency group ( $\gamma_{\text{Low}} = .17$ ) are not significantly different and thus, a moderating effect does not exist for H5. The slope of the high observation frequency group ( $\gamma_{\text{High}} = .23$ ) and low observation frequency group ( $\gamma_{\text{Low}} = .03$ ) do not show any significant difference and therefore, H6 is not confirmed. However, H7 was supported in Table 2 because the  $\chi^2$  difference between the baseline model ( $\chi^2 = 939.82$ ,  $df = 273$ ,  $p < .001$ ) and the constrained model ( $\chi^2 = 946.00$ ,  $df = 274$ ,  $p < .001$ ) is significant ( $\Delta\chi^2 = 6.18$ ,  $df = 1$ ,  $p < .05$ ). As was expected, high observation members ( $\gamma_{\text{High}} = .63$ ,  $p < .001$ ) displayed a stronger positive relationship between community benefits and community interaction than did low observation members ( $\gamma_{\text{Low}} = .34$ ,  $p < .001$ ).

Table 2  
Results of Moderating Effects of Observation Frequency

Path to	Path from	$H_0$	Standard Estimate (t-value)	
			High Observation (n = 175)	Low Observation (n = 177)
Community Interaction	Travel Involvement	$\gamma_{11}$ H5	.26 (3.49) ***	.17 (2.38) *
	Social Affiliation	$\gamma_{12}$ H6	.23 (3.25) **	.03 ( .37) n.s.
	Community Benefits	$\gamma_{13}$ H7	.63 (6.88) ***	.34 (4.49) ***

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ ; n.s. = non-significant

## Discussion and Conclusion

The results suggest that the more people perceive travel and tourism as relevant and important based on their inherent needs, values, and interests, they become increasingly interested in communicating with like-minded people by sharing their information or experiences. Highly involved people pay more attention to searching for information and show a greater level of product knowledge by understanding the strengths and weaknesses of different alternatives (Broderick & Mueller, 1999). Thus, online travel marketers should make their best efforts to attract highly involved people in their online community. They should also encourage members to actively interact with other members by providing the types of benefits (e.g., information and knowledge sharing about travel, and building close relationship with other members) the community member seeks.

The finding shows that highly sociable people are more likely to join online travel communities for developing interpersonal relationships. In other words, highly sociable people are more eager to participate in online travel communities since they view such interactive environments as an ideal place to exchange opinions and request advice about problems (Ridings & Gefen, 2004). Thus, a specific marketing strategy containing a list of specific actions should be implemented for gaining access to potential members. For example, online travel marketers could support several types of social groups focusing on very specific topics related to travel and tourism since people who join group activities tend to be highly affiliated people.

In general, being a member gives participants the opportunity to share information or knowledge and to communicate with like-minded people (Ridings & Gefen, 2004; Wang & Fesenmaier, 2004). The result also showed that members' interaction activities are driven by the perceived value that they place on online travel communities. Accordingly, relevant and valuable information should be delivered and easily accessed by all members in order to satisfy the members' needs for information sharing. To ensure the quality of information, online community managers should take an active role as experts in the online community by leading ongoing discussions among members.

Consistent with the expectation, the findings indicate that members' frequent interactions with other members intensify their psychological attachment to a chosen online travel community. This means that if members' feelings of affiliation and belonging are based on shared value and interests, members are more apt to develop a sense of membership in the online community, even though they meet in cyber space (Okleshen & Grossbart, 1998).

Interestingly, the results show that the relationship between community benefits and community interaction varies depending on a member's observation frequency level. The greater the member's observation frequency, the greater is the inclination that the member is more motivated by the specific benefits from their participation in the online community. Members' strong interactions are driven by the perceived value that they place on online communities when they fully observe the community activities without interactions. This finding underlines the importance of member's observation frequency level for making online communities more interactive and socially dynamic (Burnett, 2000). Accordingly, by addressing the specific benefits from being a member, online marketers invoke potential members' interest in community interaction.

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## The Alignment of CEO Compensation and Firm Performance in the Quick-Service Restaurants

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### Abstract

The changing business conditions in the restaurant industry affected the corporate performance and turned the present shareholders' attention to the executive compensation in these firms. This study examines the alignment between compensation and firm performance of the Corporate Executive Officers (CEOs) of the major quick-service restaurant firms for the 1992-2003 period. The findings showed that the majority of the fast-food firms, in this study, tend to overpay their CEO's based on their companies stock performance. However, the overpayment in some years was borne by the fact that several fast-food companies tend to smooth out their compensation packages during the economic downturns.

Key Words: pay for performance, executive compensation, quick-service restaurants

### Background

The increased frequency of eating out enabled the restaurant industry to emerge as one of the fastest growing industries in the U.S. From 1970 to 2001, restaurant revenues showed a steady increase, growing at a compound annual rate of 7.5 percent (Encyclopedia of American Industries, 2004). The industry sales are expected to reach \$576.9 billion by 2010. This means an increase of 45% from the sales of 2001 (\$399.0 billion) (National Restaurant Association, 2001). In addition, estimated total sales for the nation's 878,000 restaurants are estimated to hit \$440.1 billion in 2004 (National Restaurant Association, 2004). Some of the reasons that have driven the tremendous growth of the restaurant industry are tight working schedules, increasing numbers of working housewives, and increasing disposable income (Sheridan & Matsumoto, 2000).

The fast food is the largest segment in the restaurant industry with projected sales of \$142.5 billion for 2003 (National Restaurant Association, 2004). The fast-food restaurants have gained an extreme popularity among consumers because of its conveniences which allow people to eat fast without prior planning, dressing up, and having to get out of their cars (Fieldhouse, 1995). However, currently, the fast-food segment has encountered several market challenges such as increasing consumer health concerns, a high employee turnover, and a fierce competitive environment (Kalinowski, 2002; Ramseyer, 2001). These changes led to the first corporate loss of the fast food giant -McDonalds- in the fourth quarter of 2002 (Reuters, 2003). This event drew the attention of the investors who began questioning the viability of the executive compensation in restaurant firms. Executive compensation emerged as the top corporate governance issue after the Enron and Worldcom corporate scandals. Sarbanes-Oxley Act of 2002 put the scrutiny on accounting practices of the publicly-traded corporations. Nowadays, shareholders are voting "no" on compensation when a disconnect between pay and performance is observed (PR Newswire, 2004).

### Purpose and Objective

The purpose of this study is to examine the pay-for-performance trends of the major quick-service restaurant firms for the 1992-2003 period. Thus, this study investigates the compensation of the Corporate Executive Officer (CEO) of respective fast-food companies and the changes in the market value. The objective of this report is to outline the probable discrepancies that may exist between pay and performance in the fast-food restaurants.

### Literature Review

#### *Executive Compensation*

Compensation packages can be viewed as comprised of two general components: (1) a fixed or non-performance-based element (e.g. salary), and (2) a variable or performance-based portion (Lynch & Perry, 2003). The present study focuses on the three components of CEO compensation: salary, bonus and other payments.

#### Salary

As Lynch and Perry (2003) stated one benefit of using salary as compensation mechanism is that employees have certainty about the payout of their compensation package. Since the payment with performance-based compensation is less

certain than the payment under compensation plans comprised only of a fixed salary, plans with performance-based components place greater risk on the employee than do plans without them. As a result, companies may have to pay a premium to compensate employees for assuming this increased risk. Risk averse and undiversified executives will be willing to accept stock-based pay instead of cash only if the value of stock-based pay is substantially greater than the value of the cash foregone (Hall & Murphy, 2002). This leads to an important trade-off between risk and compensation. That is, the utilization of performance-based compensation will result in higher cost of total compensation. Whereas, on the other hand, when a company designs its package heavily on salary then the expected total compensation cost usually is lower.

#### Annual Performance Bonus

An annual bonus is an award for performance during a pre-determined time period, typically one year. These bonuses usually are used to provide an incentive for employees to focus on short-term performance. However, since bonuses typically are based on accounting numbers, they can encourage manipulation of the accounting numbers and a focus on short-term performance at the expense of long-term performance, resulting in sub-optimal operating decisions (Lynch & Perry, 2003).

#### Fringe Benefits

Fringe benefits can include non-cash or other indirect forms of compensation. These benefits can help in the attraction and retention of employees, particularly if the employer can provide a benefit at a lower cost than the employee would pay if he/she purchased it individually. The employer records an expense for the cost of providing fringe benefits for financial reporting purposes, and receives a corresponding tax deduction. However, for employees, the tax treatment of fringe benefits varies. For example, personal use of a corporate plane by top management is a taxable fringe benefit, but medical and life insurance, if offered to all employees on a non-discriminatory basis, are not taxable to the employee (Lynch & Perry, 2003).

#### *Agency Theory*

The agency theory (Fama, 1980; Jensen, 1986; Jensen and Murphy, 1994) states that the separation between owners and managers (Berle & Means, 1932) provides an opportunity for managers to act in their own self interest. The theory is referred to as principal-agent relationship conflict where the principal represent the owner of the business (shareholders) who delegates work to an agent (a manager). The theory delineates the reasons of the contractual problems that arise when an agent acts opportunistically when his/her interests depart from those of the principal (Berle & Means, 1967; Jensen & Meckling, 1976; Guilding et al., 2005).

#### *Pay-for-performance*

The primary device suggested by agency theory to achieve the alignment between CEO compensation (i.e., salary, bonus and stock options) and shareholders is by linking CEO compensation to the economic performance of the firm (Li & Simerly, 1998). The primary objective of most incentive plans is to drive performance so that over the long term the value of the entity to shareholders will increase. Selecting the right performance measures is one of the most important aspects of establishing the appropriate link between pay and performance (Mercer Consulting, 2004b).

There are two broad categories of measures – internal and external. Internal measures, such as financial results or firm objectives, are different from stock price or total shareholder return (TSR), which are external. Stock performance has long been favored, but for many organizations it alone is rarely the best judge of an executive's contribution to performance. Stock price is influenced by market factors outside of management's control and does not reflect day-to-day decision making (Mercer Consulting, 2004b). However, it should be noted that a hypothetical investor will still look at the change in shareholder wealth as an indicator of firm performance.

#### **Method**

##### *Sample and Data*

The sample was defined in accordance with the segment definitions provided by Wall Street Journal's Restaurant Industry Center (2003) and Technomic, Inc.'s "The 2003 Technomic Public Chain Restaurant Company Report." The initial sample of the study consisted of 24 fast-food restaurant firms. The Compustat Executive Compensation database includes data of top 1500 U.S. firms of which 12 are Quick Service Restaurant (QSR) firms. However, only 5 of the 12 fast-food restaurants had a useable data that lent itself to trend analysis. These firms were: McDonalds, Wendy's, CKE, Jack in the Box, and Sonic Corp. Annual changes in total compensation (salary, bonus, and other payments) between 1992 and 2003 were calculated in this study.

Monthly stock returns adjusted for dividends and splits were obtained from the Center of Research in Security Prices (CRSP) at the University of Chicago housed in the Wharton School at the University of Pennsylvania. Change in

firm market value is calculated by dividing the market capitalization for the current year (t) to the previous year's market capitalization (t-1): Market capitalization = Share Price x Number of Shares Outstanding

## Findings

First, the study examines year-by-year alignment between the CEO Compensation and change in market value of their respective firms. The results indicate that in the case of Wendy's, the largest discrepancy between pay and performance occurred in 1998 when the CEO pay increased more than 59%, whereas the company's market value decreased by more than 12%. The data for McDonalds demonstrated that the major conflicting year for the firm was 2002 when the CEO received a compensation increase of more than 90% but the firm's value dropped more than 40%. The pay-performance gap for McDonalds is over 130% for the year of 2002.

While one looks at CKE, he/she will notice very large swings both in pay and performance. The first of this swings occurs in 1996 when an appreciation in firm value is more than 158% and this is accompanied by an approximately 315% surge in CEO pay (See Figure 3). However, this gap was closed in the next year when a company value increased more than 150% but the CEO pay is reduced by approximately 15%. The disconnect of around 70% between pay and performance occurred in the years 2000 and 2001 when in both cases the CEO was overpaid.

Jack-in-the-Box is probably the most interesting case since the gap of over 50% was leaning toward underpayment and in 1994 the situation was exactly the opposite. In the 1997-2000 period, the company's CEO was underpaid more than a cumulative 125%. Sonic emerged as one of the few companies that managed to align the firm performance with the executive pay. This is evidenced by the fact that the swings of over -or under- payment were lower than the other firms. Probably the only year when there was a misalignment between pay and performance was the year of 2001 when the firm value appreciation of 57% was accompanied by a mere 12% increase in pay.

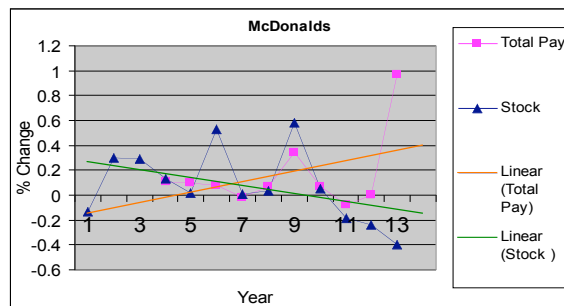
In order to get a better sense of overall alignment between CEO pay and firm performance, the annual changes in both items were accumulated over time. As it can be seen in Table 1, CKE and McDonalds led all firms in terms of overcompensation of their CEOs. While Wendy's made the middle of the rankings, Jack-in-the-Box and Sonics underpaid considerably their CEOs for the period under examination (1992-2003).

Table 1  
Pay-Performance Gap

	McDonald's	CKE	Wendy's	Jack in the Box	Sonic
Cumulative Performance	39.20%	446.20%	100.62%	108.80%	148.11%
Cumulative Pay	164.73%	572.03%	147.27%	18.73%	66.95%
Overpayment (Underpayment)	125.52%	125.83%	46.64%	(90.07%)	(81.16%)

Both of these analyses so far revealed some information about the CEO pay and performance; however, they did not indicate any trend as to what is the direction of this relationship. In order to understand the direction of the relationship between pay and performance, a trend analysis was conducted. As it can be seen from Figure 1, the trend between pay and performance indicates that the CEO of McDonald's has been overpaid overall. Particularly, the gap between pay and performance began to widen after 1998 and reached its peak in the post-2001 period. The overall trend line demonstrated that pay and performance are not in alignment in McDonalds.

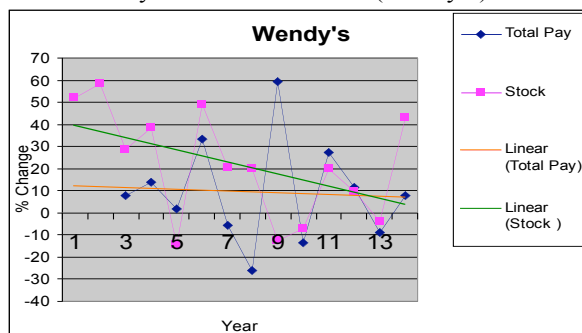
Figure 1  
Pay-Performance Trend (McDonalds)



Notes: 1=1990, 13=2002

Figure 2 shows that Wendy's CEO was generally underpaid with the exception of 1999. However, it should be noted that in the post-2001 era the company seems to lean toward overpaying its CEO.

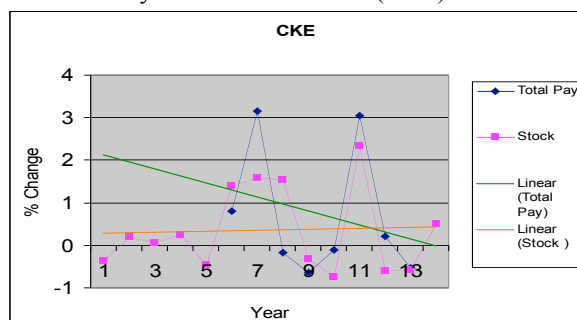
Figure 2  
Pay-Performance Trend (Wendy's)



Notes: 1=1990, 13=2002

The third fast-food company in this analysis, CKE, encountered large swings both in CEO pay and market value of the firm. Generally, the direction of the CEO compensation and firm performance was in the same direction. Although the overall trend of stock performance was flat, the CEO pay had a downward trend which indicates that the Board of Directors of CKE are trying to align pay and performance.

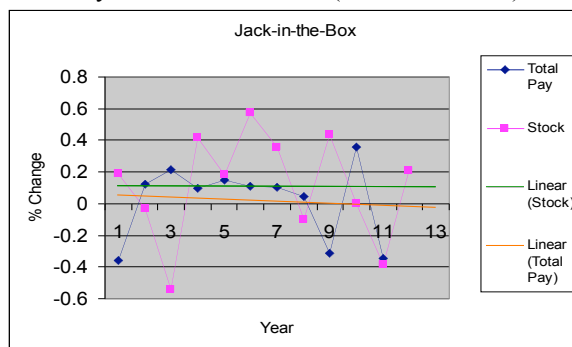
Figure 3  
Pay-Performance Trend (CKE)



Notes: 1=1990, 13=2002

The trend analysis of Jack in the Box indicates that although there are years in which there was a discrepancy between pay and performance, the overall trend between these two elements was flat. Especially, in the post-2001 environment, the company was one of the few firms that managed to align the CEO pay with the company's performance.

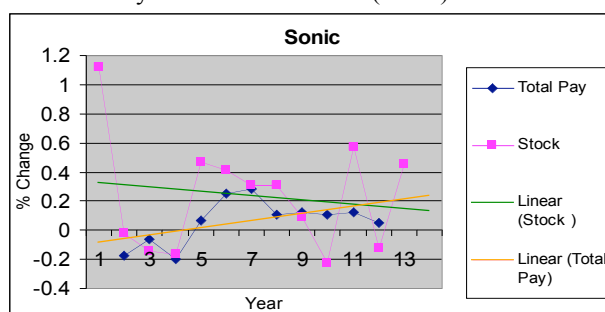
Figure 4  
Pay-Performance Trend (Jack-in-the-Box)



Notes: 1=1990, 13=2003

The study results demonstrated that Sonic Corp. was underpaying its CEO until the year of 2001 (Figure 5). Although overall trend indicates that the direction is leaning toward overpaying for performance, one should note that this is due to the fact that Sonic refrained from changing its CEO's compensation drastically during the periods when firm value decreased.

Figure 5  
Pay-Performance Trend (Sonic)



Notes: 1=1990, 13=2002

### Limitations

The findings of this study come with some considerable drawbacks. The major limitation of this study is that encompasses only five-quick service firms that have sufficient data for the 1992-2003 period as reported in the Compustat Database. Therefore, these results can not be applied to the entire fast-food restaurant segment.

In addition, the present study is descriptive in its purpose as the small sample size does not allow for use of any inferential statistics such as multiple regression. Therefore, the authors of the present study recommend the use of all hospitality industry firms in order to conduct more sophisticated analysis related to the gap in pay-for-performance.

### Conclusions

The findings showed that the majority of the fast-food firms included in this study tend to overpay their CEO's when their companies stock performance is used as a basis for compensation. This study confirmed the fact that there is generally a disconnect between CEO compensation and corporate performance. Particularly, the severity of overpay in the major fast-food corporations such as McDonald's and CKE is worth mentioning. However, the overpayment in some years was borne due to the fact that several fast-food companies tend to smooth out their compensation packages during the economic downturns. In other words, rather than "punishing" the CEO for the underperformance some firms elected to attribute the low performance to the state of the economy or state of the segment itself. This is evident especially in the post-September 11 period for the several of the fast-food restaurants.

### Recommendations for Future Research

The next logical step in this line of research is to investigate whether inclusion of stock options will change the overall trend of CEO compensation. As Mercer Consulting (2004a) reported companies started doing away with the stock options. In the lodging industry this view is supported by Kefgen and Lal (2004) who stated that the year 2003 saw a continued move away from stock options in the lodging industry - only 30% of the survey group received stock options

compared to 60% just three years ago. The authors reported that most of the largest long-term incentives consisted of restricted stock awards.

Another fruitful avenue of research will be to analyze whether the discrepancy exists between Executive Board Member Compensation and corporate performance. The present study put the spotlight on the CEO of the respective firm. Now that it is known how CEOs are compensated in the publicly traded firms one may wonder whether a CFO or VP of Marketing is underpaid or overpaid. Along with that both CEO and other executive compensation analysis may be conducted for the overall restaurant industry.

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## How and How Much to Reveal? The Effects of Price Transparency on Consumers' Price Perceptions

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### Abstract

This study investigated the effects of price transparency on consumers' price perceptions. A two-dimensional information transparency framework (sufficiency and diagnosticity of pricing information) was proposed and real-life online hotel booking sites were used for our hypothesis testing. Our results show that consumers' price fairness perceptions and willingness-to-pay are more susceptible to the influence of externally supplied pricing information when such information is presented in a high transparency context (ie. Information high in sufficiency and diagnosticity). Heightened judgmental confidence in consumers' price perceptions was also observed in the high information transparency condition. Managerial implications of the results were discussed next.

**Key Words:** information transparency; price fairness perceptions; willingness-to-pay

### Introduction

Technology is revolutionizing the way consumers choose and book hotels (O'Connor, 2003). The vast amount of information available in an e-commerce environment demands considerable amount of effort and cognitive capacity on the part of the consumers to make an "optimal" booking decision. Accordingly, there is evidence that marketers strategically reveal (or hide) certain information in an attempt to influence consumer choices. These practices may reflect a belief by practitioners that manipulation of the transparency of pricing information can influence consumers' price evaluations and judgments.

This study examined the role of pricing information transparency on consumers' price perceptions, particularly price fairness perceptions and willingness-to-pay. The balance of the paper is organized as follows. We first proposed a conceptual model of understanding the concept of information transparency from an information processing perspective. Based on this framework, we then developed hypotheses for the effects of information transparency on consumer price perceptions and empirically test our predictions in the context of on-line hotel bookings.

### Conceptual Framework and Research Hypotheses

#### *Information Transparency*

In the marketing literature, Zhu (2002) defined information transparency as the degree of availability, accessibility and visibility of information. Walther (2004) suggested that information transparency also constitutes an attribute of understandability of information. Remsperger & Worms (1999) pointed out that information richness and information transparency are two different concepts and maximum information does not necessarily create maximum transparency.

The above conceptualizations are rooted in a traditional paradigm where information is assumed to flow from marketers to consumers. However, in today's marketplace, consumers' information acquisition is believed to be a self-directed process and information search a conscious and directed activity that facilitates decision making (Rao & Farley, 1987). To integrate the self-directedness nature of information acquisition into the conceptualization of information transparency, this research departed from the traditional paradigm and attempted to understand information transparency as perceived by consumers.

#### *The Heuristic-Systematic Model (HSM) of information transparency*

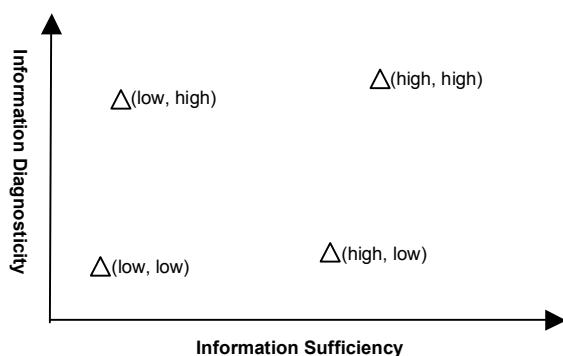
The Heuristic-Systematic Model of Persuasion (HSM, Chaiken, Liberman & Eagly, 1989) is a general framework for understanding information processing underlying attitude change. HSM asserts that there are two information processing modes: a) systematic processing mode; and b) heuristic processing mode (Chaiken, Liberman & Eagly, 1989).

Central to HSM are two key principles: "sufficiency" and "efficiency" (Chaiken, Liberman & Eagly, 1989). The sufficiency principle assumes that information processors strike a balance between minimizing their processing efforts and maximizing their judgmental confidence. Efficiency principle, on the other hand, assumes that information

processors are inclined to avoid systematic processing and heuristic cues are thus likely to exert prevailing influence on people's judgments.

Consistent with the efficiency and sufficiency principles, we conceptualize *information transparency* as a transparency continuum that is a function of the degree of information sufficiency and the degree of information diagnosticity (See Figure 1 for an illustration). The information sufficiency dimension reflects the notion that people only engage in sufficient information processing to achieve judgmental confidence. Conversely, the diagnosticity dimension captures the influence of heuristic cues in consumers' evaluations and judgements. The construct of *perceived diagnosticity* is generally defined in the marketing literature as the extent to which consumers believe the information is useful in evaluating purchasing choices (Kempf & Smith, 1998). Information perceived as diagnostic is believed to contain learned knowledge structures (e.g., heuristic cues) and as such it requires less mental effort (Chandrashekar, 2004).

Figure 1: HSM Model of Information



#### *Price estimates, price fairness perceptions and willingness-to-pay*

One major approach to understanding consumers' price evaluations involves the concept of reference price (Kalyanaram & Winer, 1995), which can be defined as a standard price in relation to which other prices are compared and evaluated (Biswas & Blair, 1991).

*Expected reference price* reflects the price ranges in the marketplace (Garbarino & Slonim, 2003). Expected reference price is anchored by three price estimates: the *highest market price*, *average market price*, and the *lowest market price* (Biswas & Blair, 1991; Urbany & Dickson, 1991). Estimates for average market prices are affected by the most frequently encountered or typical prices (Olander, 1970). Conversely, the estimates for the lowest market prices reflect perceived price fairness while the estimates for the highest market prices represent the upper boundary of willingness-to-pay (Garbarino & Slonim, 2003).

#### *Susceptibility of price fairness perceptions and willingness-to-pay to the influence of external pricing information*

Prior research has established that consumers frequently update their price estimates (Alford & Engelland, 2000). Pricing research suggests that believability is the key factor in the formation and updating of price estimates (Alford & Engelland, 2000).

We propose that information high in transparency may be perceived by consumers as more creditable and thus carry more persuasive power. For example, sufficient amount of information provides a heuristic cue that "length implies strength" (Chaiken, Liberman, & Eagly, 1989). Literature on persuasion clearly indicates that increasing the number of arguments in a message is often an effective way to increase persuasion (Chaiken, Liberman, & Eagly, 1989). Similarly, comparative pricing information is believed to be more diagnostic. Prior research shows that comparative, or category-based information magnifies the impact of external reference prices on consumers' price estimates (Smith & Wortzel, 1997). We thus propose that the form in which information is displayed (i.e., sufficiency and diagnosticity) influences the impact of external information on consumers' price estimates. Hence, the following hypotheses were developed:

- Hypothesis 1a:* Consumers' fair price estimate (the lowest price estimate) is more susceptible to the influence of external pricing information presented in a high transparency context (ie. high in sufficiency and high in diagnosticity) than in a low transparency context.
- Hypothesis 1b:* Consumers' willingness-to-pay (the highest price estimate) is more susceptible to the influence of external pricing information presented in a high transparency context than in a low transparency context.



### *Effects of information transparency on judgmental confidence for price estimates*

The underlying assumption in HSM is that people are motivated to hold valid and accurate perceptions that are congruent with relevant facts (Chaiken, Liberman & Eagly, 1989). Because of this functional assumption, the HSM assumes that the primary processing goal is to assess the validity of externally obtained information.

Rather than settling for uncertain judgments, information processors may actively search for heuristic cues. Salience or vividness of heuristic cues increases their persuasive impact, thus leading to higher judgmental confidence (Chaiken, Liberman & Eagly, 1989). In a purchase decision making context, this validity verification process involves examining and comparing product attributes, including price (Gupta, Su, & Walter, 2004). Information high in sufficiency and diagnosticity facilitates screening and comparison of product and service attributes, leaving consumers with a feeling of “exhaustive” search with less effort (Chandrashekar, 2004) or a sense of information comprehensibility (Chaiken, Liberman & Eagly, 1989). Consequently, highly transparent pricing information should lead to greater judgmental confidence in consumers’ price estimates. These predictions are summarized as followed:

*Hypothesis 2a:* Consumers’ judgmental confidence in fair price estimates is greater in a high transparency context than in a low transparency context.

*Hypothesis 2b:* Consumers’ judgmental confidence in willingness-to-pay is greater in a high transparency context than in a low transparency context.

## **Method**

### *Study Context*

The hypotheses were tested in an online hotel booking context.. Based on the results of the pilot study, four hotel booking websites were chosen as stimuli: expedia.com, travelocity.com, hotwire.com and priceline.com.

### *Participants and procedure*

A total of 243 undergraduate students in a large state university were recruited to participate in the study. More than half (55%) of these participants were female. The average age of the participants was 21 years.

Participants were given a hypothetical hotel booking situation with specifications on the purpose and dates of the stay, desired location and ratings of the hotel.

### *Measures*

#### Transparency of pricing information

Consistent with our conceptualization of information transparency (i.e., multiplicative effects), transparency of price information was computed as the product of sufficiency and diagnosticity scores.. A three-item scale was used to measure the degree of information sufficiency (e.g., “the amount of the price information provided is sufficient for me to make a booking decision.”). The information diagnosticity was captured via four items composed of ordered price listing (Diehl, Kornish, & Lynch, 2003), explicit display of highest prices and lowest prices (Chandrashekar, 2004), less mental arithmetic effort (Chandrashekar, 2004) and facilitation of price comparisons (Rao & Farley, 1987). Cronbach’s alpha for both the sufficiency and diagnosticity measure was .87.

#### Initial and post-exposure fair price estimates

Participants were asked to give their estimates of the lowest (fair) price for the hotel booking under consideration (ie., “What do you think is the lowest price that you could find online for the hotel booking specified in the scenario?” (Lichtenstein et al., 1991; Urbany et al., 1988).

#### Initial and post-exposure willingness-to-pay measures

The initial willingness-to-pay was measured using a single item of “The most I would be willing to pay for the hotel booking specified in the scenario would be \_\_\_\_\_”(Lichtenstein et al., 1991; Urbany et al., 1988).

#### Judgmental confidence in price perception

Self-reported confidence level in each price estimate was measured by asking the participants to report their level of judgemental confidence for each price estimate they gave for the hotel booking under consideration (Not confident at all =1; Extremely confident =7) (Biswas & Sherrell, 1993).

## Results

Consistent with prior research (Lord, Paulson, Sia & Thomas, 2004), analysis of covariance (ANCOVA) was applied to test our hypotheses.

### *Susceptibility of fair price perception to the influence of external price information*

#### Change in fair price estimate

We first analyzed the impact of information transparency on fair price estimate by running an ANCOVA on the post-exposure fair price estimate. The initial fair price estimate, expertise, involvement and price consciousness were used as covariates. The information transparency effect was significant ( $F=18.137, p<0.01$ ). As expected, participants in the high transparency condition indicated a lower fair price estimate ( $M=\$155$ ) than their counterparts in the low transparency condition ( $M=\$174$ ). Hence,  $H_{1a}$  is supported.

#### Change in judgmental confidence level for fair price estimate

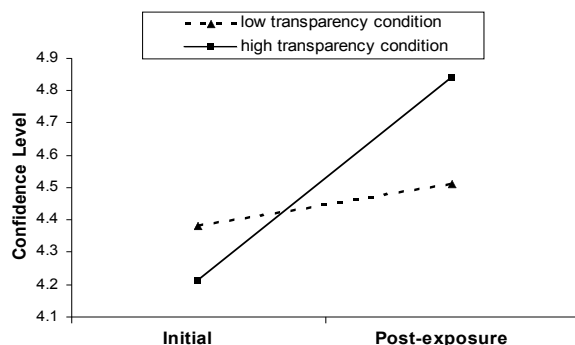
To test for the change in judgmental confidence level, confidence in the post-exposure fair price estimate was employed as a dependent variable while the baseline confidence level for initial fair price estimate, expertise, involvement and price consciousness served as covariates. The main effect for information transparency was significant ( $F=10.324, p<0.01$ ). As expected, participants who were exposed to highly transparent price information showed a higher level of confidence in their fair price estimates ( $M=4.84$ ) than those who were exposed to less transparent price information ( $M=4.51$ ). Interestingly, the difference in confidence levels was detectable despite the fact that the average baseline confidence level was slightly lower in the high ( $M=4.21$ ) than in the low ( $M=4.38$ ) transparency condition. Thus,  $H_{2a}$  is supported. See Figure 2 for illustration.

### *Susceptibility of willingness-to-pay to the influence of external price information*

#### Change in willingness-to-pay

We used a similar ANCOVA approach to examine the impact of information transparency on consumers' willingness-to-pay (WTP). The post-exposure measure served as a dependent variable whereas the initial WTP, expertise, involvement and price consciousness were controlled for. As expected in  $H_{2a}$ , the main effect for information transparency was significant ( $F=6.536, p<0.01$ ). Participants in the high transparency condition indicated a higher willingness-to-pay ( $M=\$264$ ) than their counterparts in the low transparency condition ( $M=\$245$ ). Thus,  $H_{1b}$  is supported.

Figure 2 Confidence for Fair Price Estimate

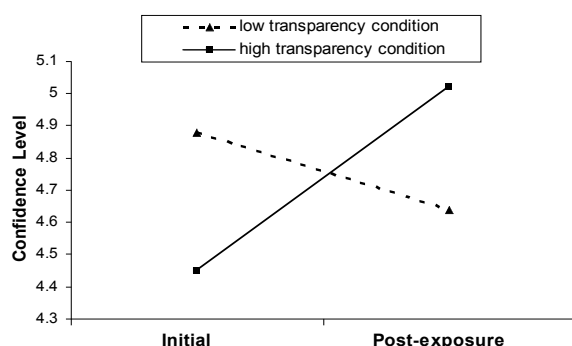


#### Change in judgmental confidence level for willingness-to-pay

As with fair price estimates, we examined the participants' judgmental confidence in their WTP estimates. The initial willingness-to-pay, expertise, involvement and price consciousness were controlled for in the ANCOVA analysis. The information transparency effect on confidence level was significant ( $F=20.756, p<0.01$ ). As expected, participants in the high transparency condition had greater judgmental confidence in their willingness-to-pay ( $M=5.02$ ) than those in the low transparency condition ( $M=4.64$ ). Again, the difference in the confidence level was noticeable despite the fact that the average baseline confidence level was slightly lower in the high ( $M=4.45$ ) than in the low ( $M=4.88$ ) transparency condition. These results provide support for  $H_{2b}$ . See Figure 3 for illustration.

Taken together, these results support our contention that consumer's price fairness perceptions and willingness-to-pay are more susceptible to the influence of external price information when information transparency is high. Moreover, high information transparency also enhances consumers' confidence in their price perceptions.

**Figure 3 Confidence for Willingness-to-pay**



## Discussions

Our findings have several managerial implications. One straightforward implication is that hotels may fail to capitalize on their marketing dollars spent on certain on-line third party travel intermediaries. For instance, some of these Web-based intermediaries feature a screening agent (ie, “travelocity picks” or “expedia picks”) to list sponsoring hotels. Yet, the listing of hotels is in no particular order, hence making the information less diagnostic for consumers to use in making purchase judgments. Our results suggest that consumers are less likely to process such listing-based information when other more diagnostic cues are available (ie, “sort by price”, “sort by location”) and even if they do, the influence of the listing-based information on consumers' price perceptions is minimal.

One challenge many hotel firms face in today's electronic selling environment is to attract consumer traffic to branded websites and to encourage direct bookings. Our results suggest that, to tackle these challenges, branded websites may need to consider adding links to competing hotels' websites or major travel intermediaries. Price information presented in isolation is insufficient and less useful in facilitating consumers' decision making processes.

Our results also underscore the need for hotel marketers to consider offering more heuristic cues in order for the intended information to have a persuasive impact on consumers' price perceptions. For example, “star rating” can serve as a heuristic cue of source expertise while “traveler reviews” is an exemplar of a heuristic cue conveying consensus information.

## Limitations and Future Research

This study has several limitations. First, the use of student samples has been debated for years in the hospitality literature, and therefore, our findings should be validated by a non-student sample. Second, we used actual search results as experimental stimuli. Even though the real-life stimuli helped to enhance the external validity of the study, the manipulation for external reference prices was fairly subtle. Finally, the current study was limited to the investigation of the effects of price transparency on price perceptions. Future research may want to address the combined effects of other transparency elements on price perceptions, for example, attribute transparency and availability transparency.

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## Service Learning in Hospitality Education: Putting Traction on Action

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### Abstract

This paper describes the foundation and support for exposing hospitality students to service learning as part of their undergraduate education. Results of an exploratory research project and the activities of two faculty members to implement a service learning component in an *Introduction to Hospitality* course located in a Baccalaureate program that requires students to complete 100 hours of community service before graduation are presented. Strategies for hospitality educators to help students become engaged in service learning activities after making service learning a requirement for graduation are also described.

Key Words: service learning, experiential education, e-portfolio, hospitality education

### Introduction

In 1996, Jacoby stated that service learning can be defined as community service, volunteerism, altruism, and citizenship for the good of a community. Effective service learning includes managing and coordinating projects and activities through teamwork, which requires students to witness life through a different lens, and experience diversity firsthand. Although the concept of service learning has been in existence for more than thirty years, the proponents of implementing service learning into the undergraduate curricula have gained attention only recently. Supporters for including service learning in undergraduate education present evidence of positive educational outcomes for students. These include increasing students' abilities to work well with others, improving leadership and communication skills, and enhancing tolerance toward others (Astin & Sax, 1998; McKinney, 2002; Eyler & Giles, 1999; Eyler, Giles, Stenson, & Gray, 2001; Bittle, Duggleby, & Ellison, 2002; Driscoll, Gelmon, Holland, Kerrigan, Spring, Grosvold, & Longley, 1997). All of these outcomes are relevant to the education of hospitality students where the goal of instruction is to foster interpersonal, analytical, social and managerial skills required by the industry. The main purpose of this paper, therefore, is to examine the experience of a pair of hospitality educators who explored strategies to get their students involved in service learning activities.

### Background

While service learning has been used in schools and colleges for more than 30 years, the term service learning has been defined and redefined over time. Two succinct and comprehensive definitions of service learning are written by Jacoby (1996) and the National Service Learning Center, are presented as follows:

“Service learning is a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development. Reflection and reciprocity are key concepts of service learning” (p. 5).

and

“Service learning combines service objectives with learning objectives with the intent that the activity will change both the recipient and the provider of the service. This is accomplished by combining community-service tasks with structured instructional opportunities that link the task to self-reflection, self-discovery, and the acquisition and comprehension of values, skills, and knowledge content” (National Service Learning Center, 2004)

Enthusiasm for service learning programs in higher education is a response to the wide critique of inadequacies of the US undergraduate education system in 1980s and 1990s. Rice (1996) described the academic community as having turned inward, developing knowledge for purposes other than social benefit, with allegiance to academic societies and political power focused within the academy instead of in the larger society. Boyer (1988, 1990) criticized the social isolation of the University and the absence of curricular relevance to the community.

Eyler et al. (2001) summarized the findings of service learning research in higher education in recent years. In addition to the benefits for universities and colleges in developing closer and significant ties to their local communities, their summary reveals that service learning contributes to the personal and interpersonal development of students. Service learning has a positive effect on “the sense of personal efficacy, personal identity, spiritual growth, and moral development” (Eyler et al., 2001, p.196). Students in service learning programs show improvement in their abilities to work well with others, in their leadership skills, and in their communication skills. It is reported that involving students in

service learning programs also fosters civic development and enhances a sense of social responsibility and citizenship skills.

Furthermore, adoption of service learning as an experiential education strategy seems to enhance traditional academic learning and career development (Waterman, 1997). Given the diversity of workers in the hospitality industry; the range of activities these businesses are involved in; and, the call for greater corporate responsibility to the larger society, all of the positive outcomes presented in the above review of the literature are extremely important to the development of our future leaders in the hospitality industry.

### **What is Service learning?**

Service learning is a method through which academic subjects, technical skills, values as and citizenship are taught. It involves active learning—drawing lessons from the experience of performing community service work. Though service learning is most often discussed in the context of elementary and secondary or higher education, it is a useful learning strategy as well for programs not based in schools.

There are three basic components to effective service learning. The first is sufficient preparation, which includes setting objectives for skills to be learned or issues to consider, and includes planning projects so they contribute to learning at the same time work gets done. Next is the component of having students carry out service learning activities. The final component requires that participants attempt to analyze their experience and draw lessons through discussion with others and reflection on the work. Reflection about the service creates a greater understanding of the experience and the ways in which volunteer service addresses the needs of the community. Reflection on community service further elaborates their concerns about community needs and their commitment to become involved in helping meet those needs. Deft guidance of the reflection experience helps the students recognize themselves as active citizens.

A note of caution, it is important to understand what ideal service learning is **not**. Service learning is not an episodic volunteer program or an “add-on” to an existing curriculum. It is not at its best when it merely requires students to log a set number of community service hours in order to fulfill graduation requirements. And finally, it should not be a unilateral benefit for either the student or the community (National Service Learning Center, 2004).

### **The Service learning Experience**

In the Spring of 2004, the authors applied for and received a modest grant to retool their *Introduction to Hospitality* course to include service learning as part of the course instruction and student grades. The stipulations of the grant were to use the funds to change an existing course to advance one of three of the University’s general education goals and to include the use of at least one of three pedagogical strategies. The authors selected the goals of advancing service-based learning and the use of both active learning and technology in development of the new course activities.

The purpose of these changes to the existing course was to accomplish the following three things. Integrate service learning into the curriculum; facilitate the use of technology in teaching and learning; and create opportunities for students to actively engage in service learning utilizing hospitality skills and knowledge. To meet the criteria of the grant, the instructors began to restructure the course by developing an interactive course website, compiling assigned readings and video presentations, generating a network of potential guest speakers to address the topics of poverty and hunger in America, securing service learning worksites, and constructing an e-portfolio template for students to chronicle their service learning and hospitality education achievements.

### **Course Website**

The instructors created a course homepage that provided students hyperlinks for the Syllabus, Calendar, Course Content, Readings, Hospitality Community Service Forms, Assignments, Reflective Journal, Surveys and Quizzes. The following is a brief description of how each of these tools was utilized in the course.

**Syllabus** – an interactive document linked students to course content, readings, Internet resources, and online library resources.

**Calendar** – a customizable calendar was provided to allow students a virtual location to track all course activities, such as class meetings/topics, community service orientation and trips, assessment due dates, and special guests visits.

**Course Content** –class notes and presentations were available for students to access before and after class.

**Readings** – in addition to the primary hospitality text, students were assigned specific readings about poverty and hunger in the US.

**Hospitality Community Service Organizer**– an online organizer page that provided students with links to examples of community service initiatives from hospitality organizations. As students explored and found examples of what hospitality organizations were doing to address poverty and hunger, they were able to add to this resource.

**Assigned Short Papers** – students were asked to complete several short assignments that were designed to raise their level of awareness of the impact of poverty on our society as well as to learn about and share how hospitality organizations are making an impact in the lives of people faced with the dilemma of poverty and hunger.

**Journal** – students were asked to keep a journal that detailed their personal thoughts and reflections of their learning about hunger and poverty and the completion of service learning activities.

### **Service learning Experiences and Resources**

Students were assigned readings from several resources including various Internet sites and books, including “The Working Poor”, “Nickel and Dimed” and “Begging for Change”. Additionally, videos and guest presentations were provided to help students think about hunger and poverty and the ways in which the hospitality industry is helping ameliorate these societal problems. It was believed that these experiences, combined with their activities at the service learning worksites help students to think more critically about the sometimes invisible and always complex problems of poverty and hunger, and encourage them to be active leaders in their communities both now and in the future. Inspirational role models were invited to speak with students about their experiences throughout the semester.

It was through a combination of experiences and guided discovery that we believed students would be able to develop an understanding and empathy and to feel the joy of serving as well as a spirit of optimism that they can make a difference. Moreover, the goal of student activities in community organizations was to help students further develop their hospitality related technical and leadership skills through opportunities to practice them at various community service venues, which included the local Food Bank and local soup kitchens, early learning centers and senior citizens communities.

### **E-Portfolios**

E-portfolios are gaining recognition as a valuable tool for learners, instructors, and academic organizations. Instructional planners are proclaiming that online folios are higher education’s new tool for students to show-and-tell about their work (Cohen and Hibbitts, 2004), and as a tool that “may have the most significant effect on education since the introduction of formal schooling” (Love, McKean, and Gathercoal, 2004). Laying aside the new-technology hype and enthusiasm, e-portfolios are viewed as a response to fundamental shifts that are occurring in teaching and learning.

Working with an on-campus instructional design consultant, an e-portfolio template was developed that contained six linked html pages. At the beginning of the semester students were provided a personal folder housed on the course website to host these pages and their work during the semester. Instruction and tutoring was provided throughout the semester to help students understand how to edit and add content to the web pages as they gained knowledge and expertise in technology.

### **Methodology**

The results reported in this paper were gathered through a pre- and post-course survey administered to students who were registered in an *Introduction to Hospitality* course at a major university. The majority of students who were enrolled in the course had declared their major to be in Hotel, Restaurant and Institutional Management.

At the beginning of each term, students were asked and directed to take an online community service survey (Survey I). During the final week of the course students were again asked and directed to complete a second online community service survey (Survey II). Survey I and II contained 24 and 18 questions, respectively. The differences between the two surveys were that in Survey I students were asked if they had participated in community service before attending college, if their parents were active in community service, and three demographically related questions. In Survey II these preceding questions were not repeated, but students were asked to evaluate the value of course and reflection activities in changing their understanding and empathy toward community service activities and the issues of poverty and hunger.

Most of the statements employed a Likert-type scale with “1” being strongly disagree and “5” being strongly agree. Additionally, students were asked to select benefits that they obtained from participating in community service activities both before coming to college and after completing the course. Data were analyzed using paired sample t-test technique, which compared each student’s responses between Survey I and Survey II.

## Results

The first survey (Survey I) was administered in the first week of classes and attempted to assess their attitudes toward community service prior to starting the course, and to learn the type, time frame, and their general support for participating in these activities. The second survey (Survey II) was administered during the final week of classes. Data were collected from students enrolled in the course for three semesters. Total student enrollment for the three semesters was 243. Collected student data was only analyzed from students who completed both Surveys’ I and II. A total 179 students completed both surveys and were used in the current report, for a response rate of 73.7 percent.

Almost 94 percent (93.8%) of the students reported to have volunteered prior to coming to college. Of the respondents, 115 (64.6%) were female and 64 (34.4%) were male. Since this was an introductory course and most students had already selected this program as their major area of study, 75.8% of respondents were freshman, 19.7% were sophomores, 3.9% were juniors and only .6% were seniors.

As a group, student attitudes about community service as part of the curriculum; as a way of connecting to the community; and felt a willingness for opportunities to complete community service activities were positive. Collectively, student responses of their attitudes toward community service activities were not significantly different between Survey I and Survey II, with the exception of their commitment to continue to volunteer because of the activities and experiences they had in the course. Comparing the mean scores of this question was found to be significantly different at  $p \leq .001$ . Their experiences through this semester enhanced their commitment to continue to volunteer.

However, when participants were divided by gender there were significant differences in their responses to Survey I. Table 1 presents the questions that were found to be significantly different between females’ and males’ mean score responses. When comparing the mean scores of student’s responses for these same questions when asked in Survey II and again segmenting students by gender, the means were no longer significantly different, with the exception of student’s intent to continue to volunteer and their reported enjoyment of participating in the volunteer activities. Female students responded more positively in their intent to continue to volunteer as a result of their community service learning experiences (4.42 v. 3.97) and in their enjoyment of the community service experiences (4.38 v. 3.98). However, both females and males mean responses were significantly different in the positive direction between Survey I and Survey II when asked if they would continue to participate in community service activities as a result of their community service in the course.

Table 1  
Survey I: Significant Differences in Student Responses based on Gender \*\*

Question Regarding Student Attitude	Female Response Means	Male Response Means
Prior to coming to college my involvement in community service	3.19	2.67
I enjoyed my community service experience.	4.39	3.95
I will continue to volunteer in community service activities because of my previous experiences.	4.23	3.59
It is appropriate for college students to volunteer in the community as a way of giving back.	4.34	3.71
I would like an opportunity to participate in a community service/volunteer experience while attending college.	4.37	3.49
Community service/volunteerism is out of place in today's universities.**	2.15	2.67
I think community service through volunteerism is an important way to interact with the community.	4.48	3.92
I believe community service/ volunteerism prepares students for working with a diverse work force.	4.45	4.05

\* Mean Scores based on a 5 point Likert-type scale. \*\* A positive response to this question response is reverse of all others.

# Significant at  $p \leq .001$ .



In both Surveys I and II, students who had participated in community service activities were asked to select from a list of eight potential benefits, those that they believed they had received as a result of their participation in service learning/community service. Table 3 presents the list of benefits that students were able to choose from, and the percentage of students that selected it from the list for both Surveys I and II. In Survey II, students' reported five of the eight benefits more often than in Survey I.

Table 2  
Reported Benefits of Community Service from Survey I and Survey II

Benefit *	Survey I %	Survey II %
Personal Satisfaction	83	88
Personal Growth	81	87
Leadership Skills	77	74
Civic Pride	58	64
Hospitality Skills	45	60
Team Building	75	59
Management Skills	44	37
Had Fun	80	90

\* Students were able to select all that applied.

When addressing the true definition of service learning researchers and theorists have agreed that for service learning to be a meaningful, the experience must have structure. Two important ways to provide structure for students in community service activities is to provide students with an orientation to the experience and for students to have an opportunity for guided reflection after the experience. In Survey I, students were asked if their prior community service experiences included these opportunities. Forty-eight point three percent of the students reported that orientation was a part of their community service experiences and 44.4% reported that reflection activities were a part of their experience. Of those students who reported to have had an orientation and reflection opportunities 88.2% and 80.2% stated that these activities were important, respectively.

As stated in an earlier section of this paper, the authors provided students with opportunities to participate and reflect on community service, and the issues of poverty and hunger in America. In Survey II, students were asked to rate the value of these activities in helping them understand and empathize with the plight of those they served. During the three semesters of this project, students heard from guest speakers of community centers who help the disadvantaged, took a tour of the local Food Bank; were assigned reflective journal activities; and, were required to develop an e-portfolio chronicling their professional and community service accomplishments. For all activities and experiences, students reported a generally positive attitude toward the value of these assignments in their understanding and appreciation of the challenges citizens of their community face. Unfortunately, it is possible that student's responses on the survey were influenced by frustration with the grades they earned and not by the community service experience. It may have been difficult for some of the students to separate their attitudes toward the grading process and their in their community. Males appeared to have a more positive attitude toward completing the e-portfolio assignment. It should be noted that students were graded on the number of community hours they completed, the quality of their reflective journal assignments and the quality of their e-portfolios.

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## Understanding Consumer Meal Preferences within a Prix Fixe Menu: A Discrete Choice Modeling

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### Abstract

Employing a prix fixe menu as a testing tool, this study empirically tested whether or not the presence of different à la carte item prices along with a bundle price influences consumer bundle choice decisions. The conjoint analysis with a rank-ordered logit model and a conditional logit model was used to estimate whether highly-priced meal items were more likely to be chosen than low-priced ones to create a prix fixe menu. The results showed clear evidence that price differences among à la carte items, in fact, have an effect on consumer bundle choice decisions.

### Introduction

Research on bundling has been well established both in economics and consumer behavior in marketing. While economic analysis of bundling has focused on the economic aspects of bundling, such as finding an optimal price for a bundle and a firm's profit maximization approach, behavioral studies of bundling have examined consumers' bundle evaluations and their psychological processes in evaluating a bundle (e.g., Gaeth, Levin; Yadav & Monroe, 1993).

Previous studies on behavioral aspects of bundling have provided evidence that consumers form the perceptions of value from buying a bundle when the bundle's price is lower than the sum of the items' individual prices (e.g., Bearden, & Manning, 1995). A key assumption of this notion was that consumers used the sum of items' regular prices as a standard to evaluate a bundle's price. Prior studies found that the larger the gap between an actual price and the reference price, the higher the value perception, and therefore, an enhanced purchasing intention (e.g., Alford & Biswas, 2002). This view of consumer's value formation in a bundling context, then, raises a question. If consumers form higher perceptions of value from a bundle that offers higher savings, will they also choose highly-priced items if they are allowed to choose their own bundles from various alternatives with different price levels? Extensive research on the behavioral aspect of bundling has explored how and why consumers form perceptions of savings by purchasing a bundle, and how to present price and discount information to enhance the perceptions of value of a bundle. The focus of those studies was on evaluating the value of a predetermined bundle. Yet, no research has considered the reverse side---how and why consumers select a particular option among various alternatives within multiple categories when they are allowed to choose their own bundles. Therefore, in this study, instead of using a predetermined bundle, we evaluate a situation in which customers are allowed to choose their own bundles for a flat-rate among various alternatives with different price levels. Therefore, the purpose of this study is to examine whether the presence of price differences among individual items influences consumers meal choice decisions when they select meals for their prix fixe menus. More specifically, this study investigates whether or not consumers choose highly-priced à la carte items to be included in their prix fixe menus. This study begins with an assumption that consumers chose prix fixe menus.

This study employs a prix fixe menu as a testing tool. In a prix fixe menu, offered by many fine dining restaurants, consumers can choose either a bundle or an à la carte item(s). For example, suppose that the prices of appetizers are \$9, \$13, and \$15, the prices of entrées are \$21, \$28, and \$30, and the prices of desserts are \$7, \$9, \$11, a consumer can pay \$25 for a prix fixe menu. If a consumer chooses a prix fixe menu (bundle), he/she can make his/her own meal combination at a single price (\$25) from appetizers, entrées, and desserts (i.e., usually no choice, but today more and more restaurants offer a bundle choice). However, if a consumer decided to choose only an entrée (\$30), he/she has to pay the full price (\$30).

### Literature Review

The study of value formation in the bundling context provides evidence that consumers form perceptions of value with higher savings when the bundle's price is lower than the sum of the items' individual prices (e.g., Kaicker, Bearden, & Manning, 1995). For example, Yadav and Monroe (1993) state that consumers perceive savings on a bundle by comparing the sum of the items' regular prices to the bundle price. A key assumption of this notion is that consumers use the sum of items' regular prices as a standard to evaluate a bundle's price. Theories support a buyer's value perception formation are

the reference price and the transaction utility theory. The concept of reference price is that when making purchasing decisions, consumers evaluate prices comparatively and use any price against other prices to evaluate the price fairness. Previous suggests that reference price has a consistent and significant impact on perceived savings and purchase decisions (Kalyanaram & Winer, 1995; Kumar, Karande, & Reinartz, 1998). Since the reference point serves as a standard comparison point, prices above the reference point are evaluated negatively, and prices below it are evaluated positively (Lichtenstein, Burton, & Karson, 1991). In other words, if consumers observe that an actual price is less than their reference prices, they perceive the savings or bargains, which may lead them to respond positively to that offer. Prior studies further found that the larger the gap between an actual price and the reference price, the higher the value perception, and therefore, an enhanced purchasing intention (Alford & Biswas, 2002; Kamins, Dreze, & Folkes, 2004).

Thaler (1985) explains a consumer's formation of value perception by proposing a transaction utility theory. He states that the total utility that consumers consider when they purchase products is divided into two utilities: acquisition utility and transaction utility. Acquisition utility depends on the value that consumers perceive (i.e., benefits of the product) compared to the money they spend to buy that product. Transaction utility, on the other hand, depends on the perceived merits of the deal (a price lower than expected), such as a good bargain or the deal itself. The mental calculation to determine the transaction utility involves comparing a customer's reference price to the actual price. Consequently, if an actual price is less than the reference price, a consumer has a positive transaction value. Negative transaction value, on the other hand, results when an actual price exceeds the reference price.

On the basis of the above discussion, three hypotheses were developed. In developing the hypotheses, we assumed that the sum of different à la carte prices served as a reference point, and this reference price was then compared with a prix fixe price. The reference price in turn influenced consumer meal choice decisions when they make meal combinations for their prix fixe menus. Therefore, it was hypothesized that when customers chose meals for their prix fixe menus, highly-priced items would influence more positive perceptions of saving and, therefore, were more likely to be selected than low priced ones. Accordingly, we specified the following hypotheses:

- H1: Given the opportunity to choose his/her own meal combination (one appetizer, one entrée, and one dessert) with a fixed price, a consumer will be more likely to choose the highly-price appetizer item than low-priced ones.
- H2: Given the opportunity to choose his/her own meal combination (one appetizer, one entrée, and one dessert) with a fixed price, a consumer will be more likely to choose the highly-price entrée item than low-priced ones.
- H3: Given the opportunity to choose his/her own meal combination (one appetizer, one entrée, and one dessert) with a fixed price, a consumer will be more likely to choose the highly-price dessert item than low-priced ones.

## Methodology

This study used a conjoint analysis. We, then, estimated consumer preferences of meal choices using a rank-ordered logit model. We also estimated a conditional logit model to compare a consumer's top choice with full rank. In the present study, the conjoint question asked respondents to rank the choice in order of preferences.

## The Empirical Model

A theoretical foundation for the analysis of a discrete choice model is the random utility theory. The random utility theory provides extensive knowledge regarding consumer choice by introducing a random error component in the utility function that can capture unexplained variance in consumer choice behavior (Dellaert, Brazell, & Louviere, 1999). McFadden (1974) developed theoretical and econometric insights into discrete choices. McFadden (1974) found that choice alternatives can be arrayed in a preference tree, with similar alternatives clustered together. Choice proceeds by first eliminating primary, then secondary clusters, until the final alternative is reached. Choice probabilities then can be estimated, based on these processes (Louviere, Hensher, & Swai, 2000). The random utility model decomposes overall utility into two components: an observable deterministic component and a random component. If a consumer  $i$  chooses alternative  $j$ , the utility is represented as:

$$U_{ij} = V_{ij} + \varepsilon_{ij} \quad (1)$$

where  $U_{ij}$  = the total utility associated with choice  $j$  for consumer  $i$   
 $V_{ij}$  = an observable component of utility of option  $j$ , and  
 $\varepsilon_{ij}$  = an unobservable random (random utility) component

Randomness arises because a researcher does not know a product's true utility to each consumer entirely. This is because some aspects of consumer preferences cannot be explained, since all factors that derive preferences cannot be identified. Thus, unreliability is inherent in the measurement processes that a researcher uses, and preferences may vary at different times or in different situations for the same or different consumers (Louviere et al. (2000). In random utility theory, excluded factors are bundled into the random component  $\varepsilon$  in Equation (1). McFadden(1974) found that, if error terms ( $\varepsilon_{ij}$ ) are independent and identically distributed with a type I extreme-value distribution, the choice probability  $P_{ij}$  can be written as a conditional logit form:

$$P_{ij} = \exp(V_{ij}) / \sum_{j=1}^M \exp(V_{ij}) \quad \text{for } j=1, 2, \dots, M \quad (2)$$

The rank-ordered logit model ( Cardell and Hausman, 1981), extends conditional logit model to rank ordered data. The rank-ordered logit model exploits all rank information by assuming that each rank is made as part of a sequential random utility selection process. It assumes that respondents choose the one alternative that provides the highest level of utility first and rank it first, then choose the alternative believed most attractive from the remaining  $M-1$  alternatives and rank it second, and so on (Mark et al., 2004). Therefore, if we assume that a consumer  $i$  prefers profile 1 to profile 2 to profile 3, and so on, until profile  $J$ , this rank order can be presented as:

$$U_1 > U_2 > U_3 > \dots > U_J \quad (3)$$

If customer  $i$ 's ranking of  $J$  choice is expressed as  $R_i (r_1, r_2, \dots, r_J)$ , then, the probability of the rank order is:

$$\text{Prob}[U(r_1) > U(r_2) > \dots > U(r_J)] = \prod_{h=1}^{J-1} [\exp(\beta X_{ir_h}) / \sum_{m=h}^J \exp(\beta X_{ir_m})] \quad (4)$$

Where  $X_{ir_h}$  is the vector of attributes of the alternative ranked  $h$  by a customer  $i$  in the ordering.

### The Data

In this study, an actual menu from a restaurant that offers a prix fixe menu was used to generate menu item attributes. Attributes were: (1) two appetizers; (2) four entrées; (3) two desserts; and (4) prix fixe price. For each attribute (i.e., except the prix fixe price) the price had two different levels, and these price levels were randomized to test whether consumers were more likely to choose highly-priced items than low-priced ones. By randomizing the prices for each meal attribute, we could measure true price influences on meal selection while controlling other factors. Table 1 provides the attributes and levels.

Table 1  
Attributes and Levels

Attributes	Levels
<b>Appetizers</b>	
Hugo's Texas BBQ Shrimp	\$10.50, \$15.50
House Salad	\$6.50, \$11.50
<b>Entrées</b>	
Parmesan Tossed Angel Hair Pasta	\$21.95, \$26.95
Grilled Pork Chop	\$25.95, \$30.05
Pepper Seared Sea Scallop	\$27.95, \$31.95
Grilled Veal Tenderloin	\$31.95, \$36.95
<b>Desserts</b>	
Chocolate Flourless Cake	\$6.95, \$11.95
Homemade Ice Cream	\$5.95, \$10.95
Prix Fixe Price	\$37.95, \$39.95, \$41.95, \$43.95

### Stimuli

Given the various attributes and levels, a large number of description profiles (cards) is possible. For this study, there were 512 possible profiles ( $4^3 \times 8$ ) for the respondents to rank. Since this would be too many profiles for the respondent to rank, an orthogonal fractional factorial design was used to reduce the number of profiles. An orthogonal fractional factorial design generated 29 possible ones. However, asking respondents to rank 29 options appeared to be too

cognitively demanding unrealistic, we randomly assigned 29 options to smaller sets of four ranking orders, and created 12 versions of a survey questionnaire with two choice sets each.

### Survey

Two pre-tests were conducted to determine the length and clarity of the survey, and whether the chosen attributes and their levels were appropriate using a random sample of college students at a state university in the Southwest. Convenience sampling approach was used. A face-to-face survey was conducted with the general population in a popular tourist attraction in the Southwest. The final 401 surveys were used for data analysis.

### Results

The respondents included 165 males (41.1%) and 236 females (58.9%). The majority of the respondents were educated (68%) attended or graduated from college or graduate college) and were white (75.6%). Respondents had annual household incomes of less than \$30,000 (17.5%), between \$30,000-59,999 (30.4%) and \$60,000-89,000 (23.5%), and more than \$90,000 (28.6%).

### Estimation Results

The rank-ordered logit model was used to estimate consumer utilities using Statistics Data Analysis (STATA) 9.0. The accepted statistical significance level for all analyses was  $p < .05$ . H1 predicted that, given the opportunity to choose their own meal combinations, consumers would be more likely to choose highly-priced appetizers than low-priced ones. The coefficient of price of appetizer (P\_APPETIZER) was statistically significant and had the predicted sign. The positive sign indicates that as the price of the appetizer increases, a consumer's utility increases, reflecting the positive utility associated with highly-priced appetizer items. Thus, H1 was supported. H2 predicted consumers would be more likely to choose highly-priced entrée items than low-priced ones to be included in their meal combinations. The coefficient of price of entrée (P\_ENTREE) was statistically significant and positive. The results indicate that, on average, people attach greater importance on the highly-priced entrée items. Therefore, H2 was supported. H3 predicted that consumers would be more likely to choose highly priced dessert items when they select their own meal combinations to create a prix fixe menu. The parameter of price of dessert (P\_DESSERT) was not statistically significant, indicating that selecting highly-priced dessert items is not much different from selecting low-priced items. Therefore, H3 was not supported.

We also randomized overall price (prix fixe price/bundle price) to test whether or not consumers have higher utilities with low-priced bundles. PRIX FIXE PRICE coefficient was statistically significant and negative as it was predicted. The findings suggest that people attach considerable importance to low bundle price. This means that as the prix fixe price increases, a consumer's utility decreases, indicating that increases in prix fixe price lead to receive lower ranked position. Table 2 presents the results of the rank-ordered logit model.

Table 2  
Rank-Ordered Logit Model for Consumer Meal Choice

Variable	Coefficient	SE	z	p> z		
P_APPETIZER	.0153*	.0078		1.96	0.050	
P_ENTREE	.0127*	.0060		2.13	0.033	
P_DESSERT	.0069	.0103		0.67	0.505	
PRIX FIXE PRICE	-.0249*	.0100		-2.496	0.014	

Number of Observations: 3,208, Prob>chi2: .0180, and Log Likelihood: -2540.07, \* $p < .05$

### Conditional Logit Model

Hausman and Ruud (1987) state that people pay more attention to their first choices from among the alternatives in a choice set. Therefore, we also estimated a conditional logit model and the results were compared with those of the rank-ordered logit model. The results of the conditional logit were not much different from those of the rank-ordered logit (except P\_APPETIZER). In the top choice, P\_ENTREE was statistically significant and had positive sign, indicating that consumers value expensive entrée items for their prix fixe meals. Overall price was also statistically significant and had negative sign as expected. However, P\_APPETIZER and P\_DESSERT were not statistically significant. Table 3 shows the results of the conditional logit estimates of first choice and rank-ordered logit estimates of full rank.

### Discussion and Conclusion

The goal of this study was to examine whether the presence of price differences among individual items influenced consumers meal choice decisions when they selected meals for their prix fixe menus. These results were consistent with the proposed hypotheses (H1 and H2) that consumers had larger utilities with highly-priced appetizers and entrées. However,

the study did not find that more expensive desserts were preferred over less expensive ones (H3). Although there is no study for why people pay less attention to the choice of dessert items, one possible explanation for this result would be

Table 3  
Results for conditional and Rank-Ordered Logit Models for Consumer Meal Choice

	**Conditional logit		Rank-ordered logit	
	Coefficient	SE	Coefficient	SE
P_APPETIZER	-.0064	.0126	.0153*	.0078
P_ENTREE	.0179*	.0092	.0127*	.0060
P_DESSERT	-.0234	.0165	.0069	.0103
PRIX FIXE PRICE	-.0535*	.0160	-.0249*	.0100

\*\* Number of Observations:3,208, Prob>chi2:.0030, and Log Likelihood: -1101.09, \*p<.05

that the respondents may pay more attention to their appetizer and entrée items when selecting a prix fixe menu, and pay less attention to dessert items since they are not main attractions.

### Theoretical Contributions

This study contributes to the understanding of the reference price and transaction utility theories in the bundling context by demonstrating how price differences among individual meal items influences consumer bundle choice decisions. The study proposed that consumers compared the sum of à la carte prices and the prix fixe price. The sum of different à la carte prices then served as a reference point. This reference point in turn influenced consumer meal choice decisions when they selected their prix fixe menus. It was stated that consumers form perceptions of value by comparing the bundle price and the sum of individual prices, and these perceptions of value were then directly related to preference or choice. Therefore, we hypothesized that consumers were more likely to choose highly-priced appetizers, entrées, and deserts to be included in their prix fixe menus. Consistent with the findings of previous studies, the results of this study support the proposed hypotheses, demonstrating clear evidence that consumers have considerable value with highest savings, which lead them to indicate the higher purchase intentions.

### Managerial Implications

Decisions to select highly-priced meal items among alternatives may depend on the segment of consumers under consideration. For example, for repeat customers, highly-priced meal items may not be their choice determinants, because they are already familiar with foods in that restaurant. However, the study shows that, on average, people are more likely to choose meal items for a bundle that provides higher perceived value. Given that higher perceptions of value directly influence choice decisions, it is recommended that price should be emphasized as one of effective marketing tools to enhance consumers' perceptions of value and therefore, to influence purchasing decisions. For example, restaurants might consider setting particular meal items relatively high, if these items generate high profit margins. High prices can reflect the perception of savings; therefore, they are more likely to be chosen. Restaurateurs may also use the above pricing approach to certain meal items, if a restaurant desires them to be the restaurant's high profit signature items. To summarize, the benefit of this study is that it provides some important implications for restaurant managers, particularly those offering meals in the form of bundles. By focusing on behavioral aspects of consumer choice, the study illustrates that the perceptions of value on a bundle play a significant role in consumer choice decisions. Accordingly, the study suggests that restaurants should consider pricing as an important strategic component and should design it carefully.

### Study Limitations and Future Direction of Research

The results of this study are restricted to prix fixe menu. Therefore, the results may not be generalized to other types of bundles. Yet, this restriction cannot be overly severe given that this study tested the influence of price on bundle choice decisions using a prix fixe menu as a testing tool. Therefore, the study can be replicated with other types of bundles to validate the pricing effects on different types of bundles. Another limitation is that this study used a convenience sampling approach, therefore, the results may not be representative of the whole consumer population. Limitations provide opportunities for future research. An extension of research is needed to validate the findings that price differences among individual items influence consumer bundle choice decision in other categories.

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## Compensation Practices and Hotel Firm Performance

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### Abstract

The relationship between compensation (direct and indirect) practices and firm performance were examined using data from a nationwide sample of 1223 hotels. Results show that in the case of management employees, direct compensation fully mediated the relationship between indirect compensation and hotel performance. In the case of non-management employees, however, such relationship was only partially mediated by direct compensation. To improve organizational performance, therefore, in the case of non-management employees it is important to consider the nature and level of benefits being offered while in the case of management direct compensation is more important.

**Key Words:** Human resources, compensation, organizational performance

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### Introduction

Progressive human resource practices have been highly valued for their ability to influence firm performance (Becker & Gerhart, 1996). Research in HRM has identified a number of practices including “employee participation and empowerment and job redesign, and performance contingent incentive compensation” as influential in improving organizational performance (Delaney & Huselid, 1996, p. 949). Much research examining the relationships between HRM and performance has demonstrated significant relationships between the two (Wright, Gardner, & Moynihan, 2003). Some evidence suggests that such relationships may be contingent on the industry. For example, Youndt *et al* (1996) examined HRM practices in the manufacturing sector and found results that were different than a study conducted by Delaney and Doty (1996) in the banking sector. Despite the growing evidence of industry specific effects this body of literature provides, there is little research examining the impact of HRM practices on organizational performance in the hospitality context (for exceptions see Warech & Tracey, 2004; Gonzalez, 2004; Haynes & Fryer, 2000). HRM practices are not only industry specific but also vary based on whether the employee is ‘white-collar’ or ‘blue collar’ (Youndt *et al*, 1996; Barringer & Milkovich, 1996). Anecdotal evidence in the hotel industry suggests that front line minimum wage and non-exempt employees have different compensation requirements compared to salaried and exempt employees. Therefore, for the first time, in this research the differential effects of HRM practices at the managerial and non-managerial levels on organizational performance in the hotel industry were also examined.

### Previous Research

HRM is considered a strategic asset and research has indicated that HR policies and practices are an important source of a firm’s competitive advantage in the marketplace since they are difficult to trade or imitate (Becker & Gerhart, 1996; Amit & Shoemaker, 1993). According to Delaney and Huselid (1996, p. 951), “prior conceptual work generally converges on the importance of HRM practices in the determination of both employee and firm-level outcomes.” Some research considers HR practices as having additive effects while other research suggests that HR practices have joint effects on organizational performance. That is, practices may each have separate and individual effects or a set of HR practices may jointly affect organizational performance. The majority of the research has treated HR practices as having an additive effect and therefore the effects of specific practices such as compensation systems (e.g., Gerhart & Milkovich, 1990) or selection systems (e.g., Terpstra & Rozell, 1993) have been studied. Other researchers note that it is likely that a system of practices, rather than any single practice, has an impact on organizational performance (Delery & Doty, 1996). When HR systems complement each other and the strategy of the organization, they are expected to positively influence organizational performance (Milgrom & Roberts, 1995). Accordingly, researchers examined the synergistic impacts of HRM practices (Delaney & Huselid, 1996) but did not provide incontrovertible evidence of such effects. They found instead that “each practice appeared to exert an impact on performance independent of the others” (Niehaus & Swiercz, 1996, p. 62). Wright *et al* (2003) examined the effects of selection and staffing, training, pay for performance, and

participation on performance measures including organizational commitment, workers' compensation, shrinkage, and productivity. They found significant relationships between HR practices and organizational commitment and both were related to operating expenses and profitability of the firm. Delery and Doty (1996) found that organizations with strategically aligned HR practices reported return on assets and return on equity figures that were nearly 50 percent higher than competing institutions that had not aligned their HR systems. Delaney and Huselid (1996) reported positive and significant associations between staffing, training, and incentive compensation systems and organizational performance. In this research, we examine the relationship between a specific HR practice, namely compensation, and performance.

### **Role of compensation systems**

Compensations systems play a critical role in influencing organizational performance. Bloom and Milkovich (1996, p. 23) suggest that "compensation is at the core of any employment exchange." Baum, Amoah, and Spivack (1997, p. 223) indicated that direct and indirect compensation in the tourism and hospitality industries "can act as a barrier to the recruitment and retention of quality employees." The total compensation an individual receives is broadly divided into direct and indirect compensation. Direct compensation comprises base compensation (wages, salary) and pay incentives (bonuses, profit sharing). Indirect compensation comprises benefits such as health insurance and unemployment insurance. The relationship between the various components of compensation and organizational performance has been widely studied. For example, Ippolito (1997) examined the role of pension plans, one form of indirect benefits, in employee performance and noted that employees who were covered by pension plans had lower turnover rates. While this measure of performance is non-financial in nature, turnover has been shown to have huge implications for organizational financial performance. Hinkin and Tracey (2000) estimated the cost of turnover for typical hotel jobs and noted that the learning costs of employee turnover have a negative relationship to consumer satisfaction and consequently to organizational performance.

Pfau and Kay (2002) report that organizations experience an increase of approximately 16.5 percent in shareholder value through implementing a select set of reward and accountability practices. Their study also found that firms that emphasize the availability of benefits to their employees are worth about 7.3 percent more than comparable firms that do not emphasize benefits as part of a total reward system. Warech and Tracey (2004) report that organizations that emphasized health benefits to employees were rewarded with an increase in market value equal to about 2.8 percent. Gross and Friedman (2004) discovered that employees who participated in benefit programs were more likely to stay with an organization. The study also found that organizations that have a reduced waiting period before employees can participate in benefits programs are more productive due to higher retention and lower turnover. Thus the inclusion of appropriate benefit packages has an important effect on organizational performance through better attraction, selection, and retention of qualified employees. Accordingly,

H1: Level of benefits will be positively related to organizational performance.

Hinkin and Tracey (2000) noted that the compensation structure of the industry is related to retention and eventually to organizational performance. Milkovich and Milkovich (1992) suggested that the pay system is more important than what an organization pays. The specific 'bundle' of base and pay incentives offered, for example, is of greater importance to the employee. Researchers have also noted that pay is a function of both the human capital (eg., education, tenure, age) and the characteristics of the job itself (Schumann, Ahlburg, & Mahoney, 1994). Researchers apply labor market segmentation theory to explain wage variations among employees due to various factors including occupational characteristics, job characteristics, and demographic characteristics of the job holders (Hanson & Pratt, 1995; Levy & Murnane, 1992; McLafferty & Preston, 1991). It is important to note that despite various factors contributing to wage differentials in organizations, particular combinations of base and pay incentives have been shown to motivate individual performance and consequently organizational performance (Wah, 2000). Kanungo and Mendonca (1988) evaluated employee preferences in compensation type using the principles of expectancy theory and identified pay as an important and highly valued component of individuals total reward bundles. The importance of pay level to individuals in organizations has been demonstrated in various studies. For example, Sweeney and McFarlin (2005, p. 129) argue that pay level "is an overt marker of one's status." Therefore,

H2: Level of pay (base and variable compensation) will be positively related to organizational performance.

While the discussions presented above highlight the importance of each component of the total compensation package, researchers note that employees in different industries will prefer different combinations of direct and indirect pay components (Barringer & Milkovich, 1996). It is possible that especially in the hospitality industry front line employees will find the availability of appropriate benefit packages more attractive than salary or wages alone. For example, a study of blue-collar workers revealed "employees have a strong preference for plans that minimize risk" (Barringer & Mitchell,

1994, p. 150). Martha Terry, a principal at Towers Perrin the national HR consulting firm, was quoted in a newspaper article as saying that while organizations prefer their employees to make informed choices, “employees...want security, value and quality [in their choices of benefits]” (Anonymous, 2005, p. 16). Thus, there is adequate anecdotal as well as empirical evidence that employees make choices based on their immediate socio-economic standing. As the cost of benefits increases each year, especially health insurance (Melanson, 2004), employees at or close to minimum wage levels in organizations will tend to select organizations that provide them access to low-cost benefits; their commitment to the organization is likely to be high reducing turnover and influencing organizational performance. Researchers argue that it makes economic sense for organizations to provide more attractive employee benefits to part-time workers (Inman & Enz, 1995; Doeringhaus and Feldman, 1993). While some workers, especially those whose wage levels are low, may find organizationally supported benefit packages attractive, individuals who have a higher earning capability and are also more knowledgeable about choices in benefits may rely less on such benefit packages. Accordingly,

H3: Pay level (base and incentive pay) of an individual will mediate the relationship between benefits and organizational performance such that the higher the pay (managers vs. non-managers) the lower the influence of benefits packages on organizational performance.

## Method

### *Sample and Measures*

Data for this study were obtained from the Hospitality Compensation and Benefit Survey (2001 through 2003) conducted by Smith Travel Research. Complete data for individual benefits, salary and organizational performance were available for 1,223 hotels. *Measures*: Four sets of measures were included in this study: (a) benefits, (b) salary, (c) organizational performance indices, (d) control variables. *Benefits*. Five major benefit categories, including *individual medical benefits, employee support, employee assistance program, retirement pay, and insurance* were collapsed into a composite measure of benefits separately for management and non-management employees. Data used in computing benefits were collected in year 2001. *Salary*. This variable was measured as the average annual pay in Year 2001 in the nearest dollar amount (not including bonus) for both management and non-management segment. *Organizational performance*. RevPar (revenue per available room) was used to assess organizational performance. The average RevPar of years 2002 and 2003 was used in analyses. *Control variables*. Prior research suggests that unionization status (Ichniowski & Delaney, 1990; Becker & Olson, 1992), size of the hotel (Long, 1993), and waiting period for benefit eligibility (Gross & Friedman, 2004) may influence the effect of compensation systems on organizational performance. Therefore, these variables were included in the data analyses as control variables. *Unionization status* of the hotel was a discrete variable coded as 1 if the response was “yes” and 0 if “no”. *Size of the hotel* was measured by the average number of management and non-management employees at the end of Year 2001. *Waiting period of benefit eligibility* was measured by the number of days an employee has to wait before benefit becomes eligible to him/her.

## Results

Means, standard deviations, and correlations for the benefit variables, salary, and organizational performance measures for management and non-management were estimated. Correlations between salary and organizational performance were higher for management, the correlations between individual benefit and organizational performance was higher for non-management employees. Next, the effects of individual benefits and salary on organizational performance was examined in a series of hierarchical multiple regression analyses, separately for management and non-management. For each analysis, the controls - unionization status, size of the hotel, and waiting period - were entered at step 1. At step 2, benefit measure was entered. Salary measure was entered at the final step. The results of a series of regression analyses are presented in Table 1. The results indicate that positive relationships exist between individual benefits and organizational performance, and between salary and organizational performance. Thus, hypotheses 1 and 2 were supported. When the effects of variables such as unionization status, size of the hotel, and waiting period for benefit eligibility were accounted for, it appears that individual benefits have the larger effect on organizational performance. However, when salary was introduced into the model, the effect of individual benefits became insignificant for the management and reduced for the non-management. These results indicate that salary may mediate the effect of individual benefits on organizational performance.

Following the mediation procedures suggested by Baron and Kenny (1986), a series of regression analyses were performed. As predicted, for management, the effect of individual benefits on salary was statistically significant ( $\beta=0.09$ ,  $p<0.01$ ). Individual benefits also yielded a significant effect on organizational performance ( $\beta=0.02$ ,  $p<0.1$ ). However, when the effect of salary was introduced into the model, the effect of individual benefit on organizational performance

Table 1  
Regression Results for Mediation Tests

	Management Salary		Non-Management Salary		Average REVPAR					
	Step 1	Step 2	Step 1	Step 2	Management			Non-Management		
					Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
1. Unionized	-0.05	-0.025	-0.01	0.02	0.007	0.008	0.008	0.02	0.02	0.02
2. Number of managers	0.50***	0.44***			0.49***	0.48***	0.34***			
3. Waiting period for benefits eligibility	-0.14***	-0.09***	-0.15***	-0.09***	0.02	0.04	0.06**	0.03	0.06*	0.08**
4. Composite benefits of management		0.09***				0.02*	-0.01			
5. Management Salary							0.032**			
6. Number of non-management			0.15***	0.12***				0.49***	0.48***	0.45***
7. Composite benefits of non-management				0.08***					0.04***	0.02**
8. Non-Management Salary										0.21***
R <sup>2</sup>	0.361	0.436	0.05	0.11	0.28	0.28	0.33	0.27	0.28	0.32
$\Delta R^2$	—	0.075	—	0.06	—	0.00	0.05	—	0.01	0.04
F for $\Delta R^2$	—	96.29***	—	45.86***	—	3.64*	50.15***	—	14.17***	42.52***

Note. (1) Unstandardized regression coefficients (B) are provided in the cells. (2) \* stands for  $p < 0.1$ , \*\* stands for  $p < 0.05$ , and \*\*\* stands for  $p < 0.01$ . (3) Number of management and non-management staff were calculated as natural log values.

was not statistically significant. These results support the mediation effects of salary on the relationship between individual benefits and organizational performance. The results of the mediation tests are presented in Table 1. For non-management, the effect of individual benefits on salary was statistically significant ( $\beta = 0.08, p < 0.01$ ). Individual benefits produced a similar significant effect on organizational performance ( $\beta = 0.04, p < 0.01$ ). However, the effect of individual benefits on organizational performance declined significantly when salary was introduced into the model ( $\beta = 0.02, p < 0.05$ ). The results supported the mediation hypothesis for non-management employees. Taken together, the results of mediation tests supported Hypothesis 3.

## Discussion

The study is not without limitations. Although adequate precaution was taken to ensure that benefits and salary data were collected at time zero in order to test their relationship to performance data collected at time 1 (after one year), the data were only from one time period; more time periods should be tested in order to make conclusive statements. Conceptualizing pay as a continuous variable could have strengthened the study. Future studies may also want to include relevant macro-economic variables, for example, labor market indicators.

The data support the contention that the combination of salary and benefits varies with industry and with employee level within organizations. As expected, there are differences between management and non-management employees in terms of the total rewards package and its effects on organizational performance. Non-managerial employees are more likely to be motivated by a combination of benefits and wages, while managerial employees are more likely to be motivated by base and incentive pay. Kanungo and Mendonca (1988) suggested that based on the principles of expectancy theory, individuals seek specific components in their compensation packages. This study identified different motivational factors between managerial and non-managerial employees. The hospitality industry relies heavily on frontline workers to deliver quality service. Accordingly, it is critical to understand what motivates these employees. As the current study indicates, access to benefits and total compensation systems impacts organizational performance. This study has identified an important difference between managers and non-managerial employees in the hotel industry, namely that non-managerial employees are more motivated by the extent of benefits an organization provides than managers. Consequently, the absence of appropriate benefit packages for front line employees can negatively impact organizational performance. The findings from this study direct HR managers' and compensation specialists' attention to the formulation of appropriate pay systems. Effective compensation systems should take into account the differences in total compensation requirements and use this knowledge to leverage organizational performance and success.

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## The Impact of Food Quality on Satisfaction and Behavioral Intentions in Restaurants

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### Abstract

This empirical study intended to investigate the importance of perceived food quality, which has been often overlooked as an antecedent of customer satisfaction and behavioral intentions in restaurant settings. Using structural equation modeling, this study evidenced that overall food quality had a significant effects on customers' satisfaction and behavioral intentions. This study also revealed that satisfaction plays the mediating role between food quality and customers' behavioral intentions. Subsequent regression analyses showed the relative importance of individual food quality attributes: taste and presentation emerged as the two greatest contributors to customer satisfaction and behavioral intentions. Research findings suggest the importance of managerial attention to the key food quality attributes that elicit customers' satisfaction and enhance return visits in the restaurant business.

Key Words: food quality, satisfaction, behavioral intentions, restaurant, structural equation modeling (SEM)

### Introduction

In the highly competitive restaurant industry, satisfying customers should be the ultimate goal of all businesses that wish to build repeat purchase (Johns & Tyas, 1996; Kivela, Inbakaran, & Reece, 1999; Sulek & Hensley, 2004). Since food is a major component of the restaurant experience, there is no doubt that the food has, and will continue to have, a major impact on consumer satisfaction and behavioral intentions. A crucial challenge facing businesses today is to provide quality food that is not only compelling for the customers, but is also able to achieve its managerial goals. Increasing needs for tasty and fresh food represents the importance of the role food plays in the attempt to outweigh other competitors. Hence, quality food can maximize the possibility of success in restaurant business. However, are customers really likely to reward those businesses that offer more attractive menu offerings and quality food?

Unfortunately, most studies have been focused on the importance of services and atmospherics and often overlooked the significant of food itself as the core competency of a restaurant. For example, Stevens, Knutson and Patton (1995) created a service quality measure, the so-called DINESERV, focusing on the service quality in creating satisfaction and understanding behavioral intentions. Caldwell and Hibbert (2002) examined the effect of music as one of atmospherics elements on restaurant patron's behavior. Although, Kivela, Inbakaran, and Reece (1999) dealt with food in explaining dining satisfaction and predicting return patronage at restaurants, food quality was not one of major interests in their study. Thus, there is no concrete evidence for verifying the extent to which food itself really influences customer satisfaction and behavioral intentions. Further, little attention has been paid to the contribution of each individual food quality attribute to the satisfaction formation, nor has there been any assessment of each attribute's relative impact on subsequent behavior or behavioral intention. To fill this research gap, this study is centered on food quality attributes in the restaurant experience. Thus, this research aims to propose and test a theoretical model consisting of food quality, satisfaction, and behavioral intentions. More specifically, the objectives of this study are 1) to assess the effects of food quality on satisfaction and behavioral intentions, 2) to test the mediating role of satisfaction between food quality and behavioral intentions, and 3) to test the contribution of individual food attributes on satisfaction and behavioral intentions.

### Theoretical Background

#### *The Interrelationship among Quality, Satisfaction, and Behavioral Intentions*

Published research offers evidence that quality perceptions and/or customer satisfaction positively affect intentions to behave in positive ways. Because of this, efforts that can improve how, when, or why quality and satisfaction can predict purchase intention have received growing attention among business practitioners and academic scholars (Cronin, Brady, & Hult, 2000; Johnson, Gustafsson, Andreassen, Lervik, & Cha, 2001). Several prominent debates have focused on which construct is more predictive of a consumer's future intentions. For example, Cronin and Taylor (1992) demonstrated that perceived service quality leads to satisfaction, and that satisfaction, in turn, had a significant positive effect on purchase intent. In their study, satisfaction had a more consistent effect on purchase intentions than did perceived quality (Cronin and Taylor, 1992). Similarly, the correlation between quality performance and behavioral intentions is found to be lower than between satisfaction and behavioral intentions, because satisfaction is perceived to act as a mediator of the quality-behavioral intentions

linkage (Dabholkar, Shepherd, & Thorpe, 2000). On the other hand, Parasuraman, Zeithmal, and Berry (1988) defend their SERVQUAL scale, which reflects the view that perceived service quality is a more reliable predictor of behavioral intentions than satisfaction. In a study of banking customers Bansal and Taylor (1997) found that customer satisfaction had no impact on behavioral intentions, whereas service quality did have an impact on behavioral intentions. Despite extensive discussions about quality, satisfaction, and behavioral intentions, there is as yet no conclusive structural relationship among these constructs. Several studies noted the mediating role of satisfaction as a key explanatory variable for post-purchase responses (Howard, 1989; Westbrook & Oliver, 1991), but Taylor and Baker (1994) found customer satisfaction to be a moderating variable in the relationship between service quality and repurchase intentions and no conclusions about causal sequence were drawn. Moreover, it has been observed that most previous research in restaurant settings has not included perceptions of food quality as one of the crucial constructs. Clearly, more research is needed on this issue, where customer satisfaction is expected to have a mediating role on the effect of food quality on behavioral intentions.

#### *Food Quality Attributes*

Food quality has been accepted as a fundamental element of the overall restaurant experience. Despite the general agreement to the importance of food quality in restaurant business, there is no consensus on the individual attributes that constitute food quality. Sulek and Hensley (2004) lumped food attributes into only one variable, food quality, whereas Kivela et al. (1999) treated food quality as one of many food attributes along with presentation of food, tastiness of food, menu item variety, and temperature of food in designing a model of dining satisfaction and return patronage. Thus, the crucial attributes of food in customer satisfaction and behavioral intention were not comprehensively documented. A thorough review of the literature reveals that the general description of food quality among researchers includes: (1) presentation (Kivela et al., 1999; Raajpoot, 2002), (2) variety (Kivela et al., 1999; Raajpoot, 2002), (3) healthy options (Johns & Tyas, 1996; Kivela et al., 1999; Sulek & Hensley, 2004), (4) taste (Cortese, 2003; Kivela et al., 1999), (5) freshness (Johns & Tyas, 1996; Kivela et al., 1999), and (6) temperature (Johns & Tyas, 1996; Kivela et al., 1999). Using part of the above-mentioned food quality attributes, previous researchers have provided empirical evidence for the effects of food quality on customer satisfaction and behavioral intention. Sulek and Hensley (2004) investigated the relative importance of food, physical setting, and service in a full-service restaurant and found that food quality was the most significant predictor of customer satisfaction. However, Sulek and Hensley (2004) found that food quality explained only 17 percent of repeat-patronage intentions, although the regression model was significant. Although several researches have investigated the antecedents of customer satisfaction focusing on restaurant quality issues (Kivela et al., 1999; Raajpoot, 2002), they did not extensively deal with food quality in predicting customer satisfaction and behavioral intentions. The extent to which the level of food quality influences customer satisfaction and behavioral intention remains unanswered.

On the basis of the aforementioned discussion, this study tested the relationships among food quality, customer satisfaction, and behavioral intention based on Gotlieb, Grewal and Brown's (1994) model. Perceived food quality is treated as an exogenous variable, whereas customer satisfaction and behavioral intention are considered as endogenous variables. The research hypotheses proposed earlier were summarized as follows:

*Hypothesis 1:* Consumers' perception of food quality has a positive effect on satisfaction.

*Hypothesis 2:* Consumer's satisfaction has a positive effect on behavioral intentions.

*Hypothesis 3:* Consumers' perception of food quality has a positive effect on behavioral intentions.

#### **Methodology**

The data used for this study were collected from five mid-to-upper scale restaurants: two in a mid-western city and three in an eastern city in the U.S. The average guest check of the selected restaurants was at least \$25. Once restaurants gave permission, self-administered questionnaires were distributed by restaurant staffs to the randomly selected customers who were waiting for checks after their dinners. Customers were asked to complete a survey on a voluntary basis and a total of 300 completed questionnaires were obtained and used in this study. The questionnaire deals with three constructs including customers' perception of quality attributes, satisfaction, and behavioral intentions in relation to their restaurant experience. The attributes designed to measure food quality were adapted from previous studies on the foodservice sector. The selected six attributes were presentation, menu item variety, healthy options, tastiness, freshness, and temperature (Johns & Tyas, 1996; Kivela et al., 1999; Raajpoot, 2002; Stevens et al., 1995). The perceived quality of food attributes was measured on a 7-point scale ranging from 1 (extremely disagree) to 7 (extremely agree). Satisfaction was measured by two items on a 7-point scale (1: extremely disagree and 7: extremely agree) based on Oliver's (1997) study. Behavioral intention was operationalized with responses to the three items using a 7-point scale (1: extremely disagree and 7: extremely agree), based upon Zeithaml et al.'s (1996) study.

The data was analyzed following the two-step approach (Anderson & Gerbing, 1988): a measurement model and a subsequent structural model. A confirmatory factor analysis was conducted to determine whether the manifest variables

reflected the hypothesized latent variables. Once measures were validated, a structural equation modeling (SEM) was utilized to test the validity of the proposed model and the hypotheses. Multiple regression analyses were also performed to examine the effects of individual food attributes on satisfaction and behavioral intentions.

## Results

### Sample Profile and Measurement Model

Of the 347 participants, a total of 300 completed questionnaires were obtained and used in the study. More female (60.3%,  $n=181$ ) and Caucasian (77.1%,  $n=226$ ) were included in the sample. The majority of the respondents was between 20 and 49 years old (75.5%) and had earned a bachelor's degree or higher (78.4%). About a third (35.4%) of the participants' annual household income was more than \$100,000.

A confirmatory factor analysis was undertaken to assess the overall fit of the three-factor model, which is composed of food quality, satisfaction, and behavioral intention (Table 1). The level of internal consistency in each construct was acceptable, with Cronbach's alphas ranging from .89 to .95 (Hair et al., 1998). Also, composite reliabilities of constructs also exceeded the cutoff value of .70, ensuring adequate internal consistency (Hair et al., 1998). Several widely used goodness-of-fit indices were used to evaluate the fit of the data (Ullman, 1996). The fit indices demonstrated that the measurement model fit the data well ( $\chi^2_{(41)} = 90.53$ ,  $\chi^2/df = 2.208$ ; NFI = 0.993; TLI = 0.994; CFI = 0.996; IFI = 0.996, RMSEA = 0.064). Standardized factor loadings of observed variables for each construct were all significant at the alpha level of .01, confirming convergent validity (Anderson & Gerbing, 1988). The extracted variance of constructs exceeded the minimum criterion of .50, indicating that the majority of variances are explained by constructs (Fornell & Lacker, 1981; Hair et al., 1998). The average variance extracted (AVE) in each construct exceeded the squared correlation between constructs, suggesting discriminant validity (Fornell & Lacker, 1981). That is, food quality, satisfaction, and behavioral intention are three separate constructs.

### Structural Model and Hypotheses Testing

A structural equation modeling was performed to test the validity of the proposed model and the hypotheses (Figure 1). The goodness-of-fit statistics of the structural model supported that the model reasonably fits the data. Using maximum likelihood estimation, the parameter estimates were assessed. Hypothesis 1 predicted a positive relationship between food quality and satisfaction. This relationship was supported by the corresponding estimate of 0.78 ( $t = 12.119$ ;  $p < 0.001$ ). Hypothesis 2 was supported with an estimate of 0.35 ( $t = 5.094$ ;  $p < 0.001$ ), indicating that satisfaction is a significant predictor of behavioral intention. Hypothesis 3 was also supported by the positive estimate of 0.53 ( $t = 6.992$ ,  $p < 0.001$ ), linking food quality and positive behavioral intention directly. 61 percent of variance for satisfaction and 69 percent of variance for behavioral intention were explained by food quality, indicating the substantiality of food quality in customer satisfaction formation and behavioral intention.

Further analyses were conducted to investigate the mediating role of satisfaction. To test the mediating effect of satisfaction between food quality and behavioral intention, the structural equation was re-estimated by constraining the direct effect of satisfaction so that it did not affect behavioral intention (set to 0). The first three conditions suggested by Baron and Kenny (1986) were set in the original structural model ( $\gamma_{11}$ ,  $\beta_{21}$ , and  $\gamma_{21}$  were significant). The fourth condition is satisfied, when  $\gamma_{21}$  becomes insignificant (full mediation) or less significant (partial mediation) than the parameter estimate ( $\gamma_{fi \text{ to } bi}$ ) in the constrained model. A partial mediating role of satisfaction was observed ( $\gamma_{21} = .53$ ,  $t = 6.992$ , and  $\gamma_{fi \text{ to } bi} = .82$ ,  $t = 12.918$ ). In addition, the  $\chi^2$  of the constrained model ( $\chi^2_{(35)} = 114.894$ ,  $p < 0.001$ ) was higher than that of the mediating model ( $\chi^2_{(41)} = 90.53$ ,  $p < 0.001$ ). A partial mediating role of satisfaction between food quality and behavioral intention suggests that marketing strategy should be directed toward generating satisfaction by providing good quality food.

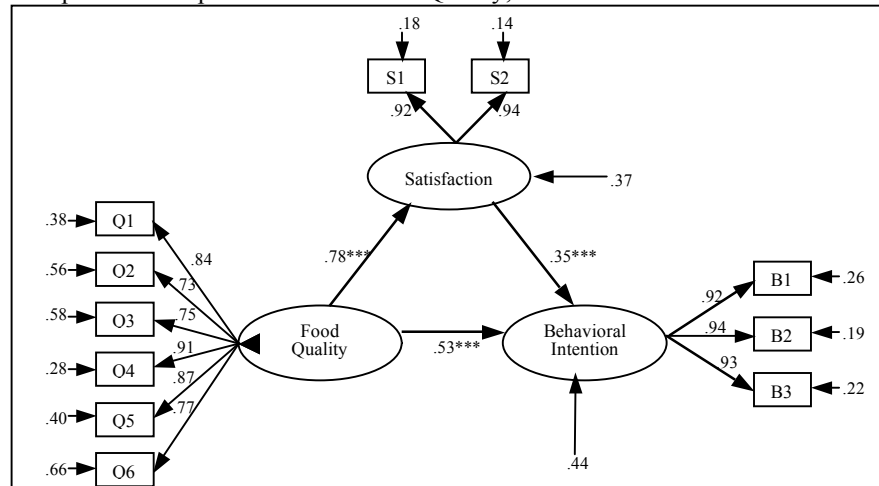
Table 1  
Measurement Item Description and Confirmatory Factor Analysis

Construct	Items	Mean (Std Dev)	Standardized Factor loadings	Composite Reliabilities	AVE	Cronbach's alphas
Q1	Food presentation is visually attractive	5.29 (1.10)	.83	.89	.62	.91
Q2	The restaurant offers a variety of menu items	5.19 (1.08)	.72			
Q3	The restaurant offers healthy options	5.16 (1.13)	.74			
Q4	The restaurant serves tasty food	5.45 (1.08)	.88			
Q5	The restaurant offers fresh food	5.42 (1.16)	.84			
Q6	Food is served at the appropriate temperature	5.38 (1.17)	.72			
S1	I am satisfied with the service at this restaurant	5.24 (1.07)	.92	.92	.86	.89
S2	I am pleased to have visited this restaurant	5.30 (1.13)	.74			
B1	I would like to come back to this restaurant in the future	5.18 (1.31)	.92	.92	.86	.95
B2	I would recommend this restaurant to my friends or others	5.22 (1.27)	.94			
B3	I would say positive things about this restaurant to others	5.27 (1.23)	.93			

Note: Q = food quality; S = satisfaction; B = behavioral intention; 1 = extremely disagree, 7 = extremely agree (N=300)



Figure 1  
A Proposed Conceptual Model of Food Quality, Satisfaction and Behavioral Intention



Note: Adapted from Gotlieb et al. (2004); \*\*\* $p < 0.001$

#### The Relative Importance of Individual Food Attributes

To predict restaurant customers' overall satisfaction based on their perceived evaluation of food quality attributes and identify the relative importance of each attribute that lead to higher satisfaction, a multiple regression analysis was conducted with the mean value of satisfaction (2 items) as the dependent variable and six food quality attributes as the independent variables. The findings demonstrate that presentation, taste, and temperature function as crucial antecedents of restaurant customer's satisfaction, and presentation and taste are the most important contributors to satisfaction, based on the magnitude of standardized coefficients. These six attributes explained approximately 55% of the variance in overall satisfaction, indicating the explanatory power of food quality in restaurant customers' satisfaction. At the same time, to predict restaurant customers' behavioral intentions, the mean value of behavioral intentions (3 items) was regressed on six food quality attributes. The results revealed that restaurant customers' behavioral intention was influenced by presentation, taste of food, and healthy options. In this model, healthy options, which were not shown as a significant predictor of satisfaction, had a statistically significant influence on behavioral intention. This result reflects the customers' increased concern with wellness. The effect of freshness as a predictor of behavioral intentions was marginally significant ( $p = .092$ ). The six attributes together explained approximately 56 percent of the variability in behavioral intentions with the overall dining experience.

Table 2  
Multiple Regression Analysis of Food Quality Attributes Predicting Satisfaction, and Behavioral Intentions

Predictors	Satisfaction		Behavioral intention	
	Standardized Estimates	t	Standardized Estimates	t
Intercept		4.488		1.324
Presentation	.333	5.687***	.299	4.960***
Variety	.011	0.212	.058	1.006
Healthy options	.076	1.415	.141	2.635**
Taste	.332	5.265***	.399	6.637***
Freshness	.101	1.551	.108	1.691
Temperature	.175	3.312***	.062	1.174
$F_{(3,279)} = 111.899^{***}$ , $R^2 = .546$ , $R^2_{adj} = .541$			$F_{(3,275)} = 115.569^{***}$ , $R^2 = .558$ , $R^2_{adj} = .553$	

Note: \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$

#### Discussion and Implications

This research empirically examined the effect of perceived food quality on customer satisfaction and behavioral intentions in a restaurant consumption context. The findings support the hypothesized positive linkage among perceived quality, satisfaction, and behavioral intentions in the proposed model. Consistent with the Cronin and Taylor's study (1992), the relationship between quality and satisfaction (.78) was stronger than the relationship between satisfaction and behavioral intentions (.35). In addition, this study confirmed that the effects of food quality on behavioral intention are reinforced by satisfaction (Howard, 1989; Westbrook & Oliver, 1991). Thus, the ability of a restaurant to deliver a satisfactory dining experience will be an important deciding factor in customers' future visitation. Furthermore, the results of multiple regression tests in relation to the relative importance of food attributes revealed that presentation and taste were the two greatest contributors to customer satisfaction and behavioral intentions. From a managerial perspective, it might be

useful to prioritize resources by focusing on the most important food quality attributes such as presentation, and taste. Foodservice researchers have largely ignore the food quality aspects of customers' restaurant experience, partly because they have recognized food as a central trait but focused more on peripheral aspects such as services and atmospherics. Given these findings, restaurant managers should not overlook the significance of food quality attributes, which explained approximately 55% of the variance in both satisfaction and behavioral intentions. Within a competitive marketing environment where customers most often evaluate and make choices among several competing alternatives, inclusion of more exogenous variables such as services and atmospherics is desirable so as to provide deeper insight into the factors that restaurant owners and managers need to stress in their total offering.

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## Impact of Manager Food Handling Certification on Food Safety

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### Abstract

Food safety in foodservice operation in the US is a serious health concern. To help improve food safety, states have turned to mandatory food handler certification of managers. This study was designed to determine the impact on food safety of mandatory certification by surveying managers during regularly scheduled health inspections. The results showed increased knowledge after certification, but no significant improvement in inspection scores. This is not to say that certification is not important, but that it is but the first step to safe food. The challenge is to convert the increased knowledge gained through certification into better inspection scores.

Key Words: foodservice, food safety, health inspection, certification

### Introduction and Literature Review

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Foodborne illness poses a significant health risk for US citizens. While the exact number of incidents of foodborne illness in the US is unknown, estimates have placed the number between 6.6 million and 81 million per year (Food Safety and Inspection Service, 1990; Mead et al., 1999). In 1999, the Centers for Disease Control estimated that 325,000 people are hospitalized, and 5,000 die annually as a result of foodborne illness (CDC, 1999). Given the magnitude of the problem, it is logical that a number of the incidents of foodborne illness could be traced back to foodservice operations. The number of reported incidents traced back to foodservice operations has been estimated to be 75% of all reported cases (McGorry, 1998). Studies indicate that foodservice workers often lack safe food handling knowledge, especially as it relates to temperature control, personal hygiene, and the (sanitary) care of utensils (Manning & Snider, 1993). Foodservice operations today are facing a number of problems that have contributed to food handlers not being as knowledgeable as they should be on food safety issues. A growing literacy barrier (Colorado State University Cooperative Extension, 2001), has created training issues for many operations. Additionally, operational growth has also been linked to increasing risks: a least one report has paralleled the increase in consumption of restaurant food with the increased risk of illnesses being transmitted by food handlers (Cotterchio, M., Gunn, J., Coffill, T., Tormey, P., & Barry MA, 1998).

In an effort to ensure public safety, states have begun turning to training and sometimes mandatory certification of food handlers (Raval-Nelson, Smith, 1999). From 1989 to 2002, the number of states requiring certification has increased from 3 to 17 (Almanza & Nesmith, in review; Speer & Kane, 1990). Certification regulations can differ greatly from state to state. Policies differ on: whether certification is mandatory or recommended in that state, whether regulations pertain to managers versus food handlers, whether the certified person must be on-site at all times, recertification, approved examinations, training requirements, exemptions, turnover, fees, instructor requirements, and how certification is checked (Almanza & Nesmith, in review). As a result, the impact of mandatory food safety certification on foodservice inspection scores has been difficult to estimate. As the number of states mandating certification has increased, there have been a number of studies on the effectiveness of training and mandatory certification.

A meta-analysis conducted by Riben, Mathias, Campbell, and Wiens (1994) evaluated 39 articles. Thirteen of the 39 studies were included in the comparative analysis. Those studies were then divided into two main categories: Those

that focused on food safety training (including certification) and those that focused on the inspection process. According to Riben, Mathias, Campbell, and Wiens (1994), only five out of seven studies showed an improvement in inspection scores with certification. In addition, on-site education (without certification) made no difference in inspection scores in a study by Kirshner (1978). Clearly, results of the Riben et al. literature review demonstrated mixed results, possibly due to differences noted in rigor of the studies and type of foodservice studied (cruise ships as compared to restaurants). In addition, Riben et al. (1994) noted that the limited number of studies that have been done make it difficult to draw conclusions about the effectiveness of food handler education and restaurant inspections in improving food safety in restaurants.

In addition to the studies identified by Riben et al., a number of other studies were found relating inspection score to foodborne illness and certification to inspection scores. In one regional study of restaurants in Seattle-King County, a restaurant with an overall inspection score less than 86 (using the traditional “demerit” system) was found to be five times more likely to have an outbreak than one with a higher score (Irwin, Ballard, Grendon, & Kobayashi, 1989). Specific types of violations were found to be more closely associated with outbreaks. They included improper food protection practices (especially improper temperatures), improper storage and handling of equipment, and any “critical” violation. A study in Los Angeles County was conducted to equate certification with inspections scores. The results of this study are difficult to compare to other studies because the program was multi-faceted and included some novel provisions, such as posting of inspection scores in the restaurant in the form of grades, the opportunity to have owner-initiated inspections, and the use of an external fraud hotline to report restaurants believed to have unsafe practices (Fielding, Aguirre & Palaiologos, 2001). One other study suggested that foodservice manager certification has limited impact on inspections with the exception of scores related to operation-equipment-structure (Wright & Fuen, 1986). In that study, knowledge improvement was minor and not statistically significant. By contrast, a study by Cotterchio, Gunn, Coffill, Tormey, and Barry (1998) found that managers that were mandated to attend a training and certification program did show a significant improvement in overall inspection scores, although improvements were not shown in all categories.

The differing results as to the impact of certification may be due to a number of reasons: difference in the manager’s education and experience, type of restaurant, how and where the study was conducted, who conducted the inspection, and the population size studied. This study was designed to determine the impact manager and operation demographics on food safety. In addition, it was designed to be large enough for the sample to be fairly representative of the nation as a whole. This study primarily looked at how certification along with manager and operation demographics impacted knowledge scores and how knowledge and certification impacted inspection scores. The results of this study should be useful for states considering mandatory certification as well as foodservice operations in those states. By understanding the true impact of certification, states should be able to craft more effective legislation and restaurants should be able to develop effective training programs.

## **Methodology**

The survey instrument used in this study was based on a pilot survey tested in Tippecanoe County, Indiana. The survey was divided into three main sections: information concerning the manager on duty, knowledge questions, and information about the restaurant. The section concerning information about the manager on duty included questions concerning experience, training, the food safety credentials, and general demographics. The next section covered general food safety knowledge. The manager was presented a series of 12 scenarios to test their knowledge in the areas of receiving, cooking, holding, storage, serving, and personal hygiene. These items had previously been identified as foodborne illness safety risks by the FDA (Food and Drug Administration, 2004). The manager was first requested to indicate if the practice outlined in each scenario was acceptable. If the practice was deemed unacceptable, then the manager rated, on a scale of one to five, how likely it was to cause a foodborne illness (one being not likely and five being very likely). Based on responses to the 12 scenarios, knowledge and relative risk scores were computed. The initial knowledge score was the number correct out of 12. Relative risk scores were calculated using the respondents’ ranking on how likely they thought the practice would be to cause a foodborne illness. These scores judged the respondents’ perception of risk for each of the scenarios. To evaluate the perception of risk, a baseline score was established for each of the unacceptable scenarios by asking all 28 county health department managers to complete the knowledge section of the survey. A risk score was calculated for each manager by summing the difference between each respondent’s rating from the baseline rating for each scenario. The final section of the survey, restaurant information, was used to determine if type of establishment had any impact on knowledge and inspection scores. Information elicited in this section included type of operation, chain verse independent, and if the unit/general manager was a certified food handler.

To ensure at least 1000 returned surveys, 5000 surveys were distributed. Eight state health departments participated in this national study. To ensure a diverse sample of states, the following criteria were considered when selecting the states: geographic location, population, and manager certification policies. The following states participated

in this study: Delaware, Indiana, Minnesota, Michigan, California, Arizona, Alabama, and Georgia. Three states had passed certification laws and five had not. Surveys were divided among states based on their populations, resulting in 46 percent of the surveys being distributed to the states that had passed certification laws. Within each state, individual counties were selected for participation based on the similar criteria to that for selecting the states.

Each participating county was sent an administrative packet along with packets of manager surveys that corresponded with the number of inspectors in the county who were participating in the study. Each inspector packet contained 50 sealed envelopes which included the manager surveys as well as instructions for completing the surveys. The administration packets contained a letter explaining the process and “masking” labels tailored to their inspection reports. These labels were to be used to “masking” or concealing the name of the establishment and the manager on duty. There were also labels containing the six-digit numbers for all surveys to be distributed in their county. The counties in Arizona did not receive a standard administration packet because they did not generate hard copies of the inspection reports; instead all reports were posted on the internet. In place of the labels, their packets included a sheet that included the six-digit number, a space to write the establishment name, and a space for the establishment’s permit number.

The procedures for conducting this study were designed to make it as convenient as possible for the states, counties, inspectors, and foodservice managers. The inspector conducted routine inspections using their health department’s standard procedures and forms. When the inspector entered the foodservice establishment, he/she handed the manager on duty one of the 50 envelopes. In that envelope was the foodservice manager survey, a cover letter explaining the study to the manager, a prepaid postage envelope for returning the survey, and a business card with contact information for the principal investigator of the study. On the front of the original envelope was a six-digit number that was used to match the survey with the corresponding health inspection report. After the inspection was completed, the health inspector attached a label to the back of the inspection report with a six-digit number that corresponded to the same number located on the foodservice manager knowledge survey and envelope. A copy of all completed inspection reports with all identifying information masked were sent to the researchers. In the case of Arizona, the sheets used to record the six-digit numbers, the name of the establishment, and the permit number were returned to the researchers. The information on this sheet was then used to download a copy of the health inspection report from the health department’s website. The six-digit number was written on the copy of the health inspection report by the researcher and all other identifying information was removed before they were then given to a data entry individual.

Each violation on the health inspection reports was coded by the researchers according to specific violation on a composite coding sheet which was based on the inspection forms for all states participating. Each inspection report received three separate scores, one based on the critical and non-critical findings, one based on the traditional or demerit system, and one hybrid traditional system that deducted additional points for repeat violations. Data were analyzed to specifically determine correlations among inspection scores and knowledge scores for each question. Additionally, correlations and regression analysis were used to examine relationships between credentialing, knowledge, training, and type of manager certification. Descriptive statistics were also used. SAS version 9.0, SPSS version 12, and Excel XP Office Professional were used for analysis.

## **Results**

Initially, 5000 surveys were distributed to the counties; however, not all the surveys were distributed to restaurants. One county misplaced all 200 they were sent and withdrew from the study. Other counties provided no inspection reports nor were any manager surveys received from those counties. This indicated that although the county health inspector gave the forms to the restaurant inspectors for the county, they were likely not distributed to the individual restaurant managers. However, the researchers were only able to confirm this for the one county; therefore the sample size was 4800. The response rate for the restaurant inspection forms was 79.52% (3817 returned out of the 4800). The response rate for the restaurant managers was 24.42% (1172 out of 4800). Not all managers answered all the questions on the surveys; therefore, the number of responses was different for different questions.

The majority of the respondents reported that they had been certified, even for states where certification is not mandatory. Of the 1131 respondents to the certification question only 157 (13.88%) reported that they had never been certified. Of the three major certification programs, National Restaurant Association (ServSafe), National Registry of Food Safety Professionals (Food Safety Manager Certification), and Experior (Certified Professional Food Manager), the majority (56.10%) completed the National Restaurant Association (ServSafe) program. The next most popular program was the Experior (Certified Professional Food Manager) with 13.10% followed by National Registry of Food Safety Professionals (Food Safety Manager Certification) with 7.28%. The remainder of the respondents claimed that they were certified by other programs such as ones from state, county, or company. Some claimed to be certified by a state or county that did not have a certification program. Instead the state/county relied on one of the three programs listed above. Since it

was not possible to determine which one, those data points were dropped. Eighty-eight percent of the respondents who were certified had been certified in the last five years.

The majority of the managers responding to the survey (86.12%) had worked in the foodservice industry for more than 5 years. The average time spent as a manager was between 10 and 15 years. The majority of the respondents were either the general manager (30.97%) or the owner (29.93%), followed by the kitchen manager (14.45%) and the assistant manager (5.80%). The majority of the respondents were male (54.76%) and almost evenly distributed between the ages of 25 and 54 years. Highest education levels of the managers varied greatly from managers with some high school, but no diploma to managers with graduate degrees. The greatest percentage of managers had a high school degree (30.72%) followed by some culinary/technical school/college (23.81%) and those with a bachelor's degree (19.62%). The types of restaurants responding were fairly representative of the industry in general. Quick Service, at 26.99%, was the most numerous response followed by Casual Dining at 17.21%. Next came Family Dining (14.53%), Cafeteria/Buffer (12.20%), Limited Service (7.70%), and Fine Dining (6.23%). The number of independent and chain operation were almost equally split with 50.61% and 49.39%, respectfully.

The first analysis was to determine the impact of certification and the manager and operation demographics on manager knowledge/risk scores. Because the knowledge and risk scores were highly correlated and the general linear model results were the same, only the results of the knowledge score analyses are reported here. Certified managers had an average score of 9.18 out of 12. This score was significantly higher than the average (8.26) for the managers who had never been certified. The F-value was 36.59, yielding a p-value of <0.001 and an R-squared of 0.031. While certification was significant it did not explain much of the variance in the knowledge score. Other variables individually significant were: position ( $p \leq 0.001$ ), education ( $p = 0.024$ ), whether the operation was an independent or part of a chain ( $p \leq 0.001$ ), total years managing ( $p \leq 0.001$ ), and total years in the industry ( $p \leq 0.001$ ). Senior managers tended to be more knowledgeable. In addition, the more education, the more experience in the industry and managing, the higher the score. Finally, if an operation was part of a chain, then the manager had a higher knowledge score. Clearly there are correlations between many of the significant variables. Therefore, regression was used to develop the best model for explaining changes in the knowledge score. The significant variables in the final model included certification status, years in industry, and if the operation was part of a chain. Certification status and years in industry were significant with a p-value of <0.001. Chain affiliation was significant with a p-value of 0.014. The final model had an R-square of 0.157. Clearly there were other variables not measured by this study that impacted the knowledge score.

The next and most important analyses dealt with how the different variables impacted the health inspection score. There was no differences in the results produced by the three different methods for calculating an inspection score; therefore, only the results for the hybrid traditional score are reported here. Surprisingly, very few of the variables tested had a significant impact on health inspection scores, either individually, or when controlling for other factors. Certification status and knowledge did not significantly impact inspection score, F-values of 1.79 ( $p = 0.182$ ) and F-value of 1.01 ( $p = 0.314$ ). The only variables that produced significant impacts on inspection scores were inspector and gender. Females had significantly higher inspection scores than males, 89.81 versus 88.45. The p-value for this test was 0.022 and the F-value was 5.24. The inspector had the greatest impact on inspection scores. The F-value was 18.44 yielding a p-value of <0.001. When inspector was placed in the model with gender, gender was no longer significant.

### **Conclusion and Impact on the Industry**

Certification of managers, and the training that generally goes with it, are important steps to improving food safety at foodservice operations. The fact that manager certification and food safety knowledge did not significantly improve health inspection scores does not mean that the move by states to mandate certification should be slowed or stopped. Clearly, certification improved knowledge, and improved knowledge is vital to improving food safety. There could be several reasons why increased knowledge did not lead to improved inspection scores. First, it is likely that a small amount of change in knowledge and inspection scores could have been masked by the low response rate for managers who had never been certified. The voluntary nature of the participation by foodservice managers may have biased the sample. Only those managers with strong commitments to food safety were likely to take the time to respond. As expected, the greatest percentage of respondents had been certified, indicating their commitment to food safety. The remaining responding managers, while not certified, were likely to have a greater commitment than those who did not respond. Because both groups were likely to be committed to food safety some of the difference between the groups may have been masked. That being said, it is unlikely that this would explain the level of lack of significant difference found. Particularly, considering those managers who had never been certified had inspection scores that were not significantly different from managers who did not complete the survey. This indicates that, while the commitment of those responding may have been greater, their operations were no safer. Therefore, the results produced by this study are likely to accurately reflect the average effectiveness of certification in the US. This does not mean that certification is not an important step to serving safe food,

simply that its effects can be negated by other factors. Those factors could include operational and facility issues. It is important that those other factors be identified and effectively dealt with in order to get maximum benefit from certification.

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## Effects of Institutional DINESERV Dimensions On Customer Satisfaction, Return Intention, and Word-of-Mouth

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### Abstract

The objectives of the study were to identify attributes that influence consumer selection of a university dining facility and to examine the influence of food quality, atmosphere, service quality, convenience, and price and value on customer satisfaction, return intention, and word-of-mouth endorsement in food service university establishments. A web survey questionnaire was distributed to 4,659 students and full-time employees at a public university in the Midwest from May 10 – 24 in 2005. Descriptive analysis, factor analysis, and multiple regression analysis were used to analyze the data. The findings showed that Institutional DINESERV Dimensions had a significant positive effect on overall customer satisfaction.

Key Words: Food quality, Institutional DINESERV, customer satisfaction, return intention, word-of-mouth endorsement.

### Introduction

The college student market is currently influencing the expansion of university food services. To satisfy these students, university and college food service operations need to deliver a variety of fresh, healthy, and tasty food. Even though the literature supports the idea that food quality, atmosphere, service quality, convenience, and price and value are predictors of customer satisfaction (Qu, 1997; Kivela, Reece & Inbakaran, 1999; Pettijohn, Pettijohn & Luke, 1997; Lee, 2004), few studies have actually investigated these factors in relation to the success of university food service facilities. The dearth of literature in this area is the driving factor behind this research study.

Customer satisfaction is often used to predict the likelihood of customers returning to a restaurant. Yuksel and Yuksel's study (2002) have shown that customer satisfaction is important to food service managers. Customer satisfaction leads to repeat patronage, brand loyalty, and new customers through word-of-mouth advertising. The objectives of this study then were:

1. To identify the factors that influence customer selection of a university dining facility.
2. To examine the influence of food quality, atmosphere, service quality, convenience, and price and value on customer satisfaction, return intention, and word-of-mouth endorsement.

### Literature Review

Numerous studies (Qu, 1997; Kivela, Reece & Inbakaran, 1999; Pettijohn, Pettijohn & Luke, 1997; Lee, 2004) have shown that food quality, atmosphere, service quality, convenience, and price and value have been related to increased sales, revenue, and customer loyalty for a restaurant. In addition to assessing customer satisfaction in the food service industry, it is important to learn the exact restaurant or dining attributes that are most important to customers.

Some studies have found that customer satisfaction with a restaurant's food quality is a powerful predictor of customer intent to return to that restaurant (Qu, 1997; Pettijohn, Pettijohn, & Luke, 1997). In studies of both fast food restaurants (Pettijohn, Pettijohn, & Luke, 1997) and Chinese restaurants (Qu, 1997), food quality was ranked as one of the most important determinants of a customer's decision to return. This element was significantly more important than cleanliness, value, price, and convenience, which ranked second, third, fourth, and fifth, respectively.

In service settings, such as restaurants and hotels, the atmosphere in which the service takes place may also be crucial in determining the customer's perception of and satisfaction with the service encounter. According to a Purdue University study, its new Fred and Mary Ford Dining Court, which offers students a restaurant atmosphere and a varied menu, is serving 66% more customers than was anticipated after a major renovation. The ambience of the facility, which is decorated with upscale furniture, colors, and finishes, is the major factor that keeps students coming back (FoodService Director, 2005). The resident hall dining manager at the University of Tampa reported that customer counts went up to 85% in total counts after the renovation of one dining cafeteria (FoodService Director, 2003).



Yuksel and Yuksel's (2002, p. 54) study of tourist satisfaction with restaurant service stated that "service environment holds a central role in shaping the nature of customers' behavior, their reactions to places and their social interactions. Customers are likely to spend their time and money in an establishment where the service environment prompts a feeling of pleasure." Many studies have cited the importance of service quality for customer satisfaction with a service encounter (Stevens, Knutson, & Patton, 1995; Qu, 1997; Pettijohn, Pettijohn, & Luke, 1997). In restaurant settings, service quality has been found to be important in determining both customer satisfaction and return intention. A study of ambient restaurant patrons in Hong Kong confirmed that service quality was a strong factor in customer intent to return to a given restaurant (Kivela, Inbakaran, & Reece, 2000).

Providing appropriate food services in a campus setting is increasingly important because collegiate customers are more demanding. Students have less time to eat off campus (Klassen, Trybus, & Kumar, 2005). Klassen, Trybus, and Kumar (2005) studied food service planning on a campus. Their results indicated that most students want dining facilities near their residence halls, classrooms, and libraries. Also, Mattila's (2001) study revealed that convenient location was an important motivation for respondents in the low-commitment group.

Kivela, Inbakaran and Reece (2000) categorized telephone reservations and parking under the category of convenience. Shoemaker (1998) studied a strategic approach to segmentation in university food service. After analyzing the data with cluster analysis, the study indicated that "short walking distance to classes and offices" fell under the label/category of convenience of location.

Most customers visit restaurants not only because of good food, quality service and a pleasant service environment, but also because they find that the price represents value for money (Yuksel & Yuksel, 2002). The meaning of value, however, is relative. It might be low price, no matter the nature of the consumer, the quality the consumer receives for the price, and/or what the consumer gets for what he or she gives (Yuksel & Yuksel, 2002). Klassen, Trybus, and Kumar (2005) found that price is the most important criterion, with 62% of the respondents choosing that factor. Even though most of a food outlet's pricing is already discounted, price is still the main concern for students when making a food purchase decision.

Lee's (2004) study concluded that dining environment and the competency of employees were the most influential dimensions of intention to revisit a name brand university dining service. Steven, Knutson, and Patton (1995) found that high customer satisfaction with service quality led to the propensity to revisit the dining unit. Therefore, this researcher believes that return intention should be included in this study.

Word-of-mouth communication, which relates both to positive and negative evaluations of service encounters, has been shown to influence other people's purchase behavior. Positive word-of-mouth communication is reported to emerge from satisfactory service encounters, while negative communication generally follows unsatisfactory encounters (Susskind, 2002). Struebing (1996) stated that revenue streams can be generated by attracting new customers via word-of-mouth recommendations, increasing the percentage of repeat customers, and increasing spending or use by existing customers.

### **Research Design and Methodology**

The target population for this study was undergraduates, graduate students, and full-time employees at a public university in the Midwest during the spring semester of 2005. A stratified sampling method was used to choose the sample. Fifty percent of meal plan holders and 10% of non-meal plan holders were chosen to participate in this study. A web survey questionnaire was distributed to 4,659 students. A total of 770 (16.5%) questionnaires were collected.

The collected data were analyzed using the Statistical Package for Social Science (SPSS). In order to achieve the study's objective, frequency was first computed to examine the demographic and behavioral characteristics of the respondents; independent sample t-test and one-way ANOVA were used to identify overall satisfaction with types of meal plans and associate this satisfaction with age group. Factor analysis was used to identify student expectations of the Institutional DINESERV Dimensions in the university food service. Lastly, multiple regression analysis was employed to measure the relative impact of Institutional DINESERV Dimensions on customer satisfaction and the impact of customer satisfaction on return intention and word-of-mouth endorsement.

### **Results**

#### *Characteristics of the Respondents*

The sample consisted of 330 male respondents (42.9%) and 440 female respondents (57.1%). Among the 770 respondents, 621 were White American. Forty-seven percent of the respondents were freshmen and sophomores, 35% were

juniors and seniors, and about 18% were graduate students, non-degree students, and faculty or staff. About 74% of the respondents were ages 17-22, followed by age groups of 23-30 and 31 or above, which accounted for 14% and 12%, respectively. All the respondents were asked about the type of meal plan they had. The results indicated that 489 respondents had a student meal plan, 69 respondents had a faculty/staff meal plan; 212 respondents had no meal plan and either used cash or charged their meals to their bursar account.

#### *Attributes of the Institutional DINESERV Dimensions*

The identification of the respondents' expectations level with the attributes of Institutional DINESERV was achieved through a mean rating of 22 attributes. The higher mean scores indicated that the attributes exceeded the respondents' expectations; while the lower mean scores indicated the attributes failed to meet the respondents' expectations. The ranking indicated that most of the attributes were just above the midpoint of the scale, meaning that the 22 attributes met, but did not exceed, the respondents' expectations.

The overall mean score of students' expectation level was 3.23. Attributes, such as convenient location, short walking distance, dining room environment, friendly dining manager, taste of food, and level of comfort in the dining room met the students' expectation level. All of these attributes were rated 3.35 or higher. Several attributes were rated below average: Parking convenience, reasonable price, and good value for the price. The mean ratings of these attributes ranged from 2.81 to 2.75.

#### *T-Test and Analysis of Variance*

One-way ANOVA was used to determine whether there was any significant mean difference in the overall satisfaction level according to type of meal plan and age group. The ANOVA test showed that there was a significant difference between overall satisfaction and type of meal plan. Tukey post hoc test was used to discover the difference among age groups. Faculty/staff meal plan holders had a higher mean difference than did respondents in the other categories. Tukey post hoc test was conducted to assess which age group showed a significant difference. The results revealed that respondents who were 31 years old and above had the highest mean score and showed a much higher satisfaction level relative to the youngest age groups (17-19 and 20-22).

#### *Factor Analysis*

The current study used a factor loading cut-off of 0.50 for inclusion of items in the factor analysis. Only factors with an eigenvalue equal to or greater than 1 were considered as significant. The solution that accounted for at least 50% of the total variance was regarded as satisfactory. After analyzing the data by using the Principal Component Analysis of factor analysis with a VARIMAX rotation, the 18 variables were reduced to five factors, which explained 77.22% of the overall variance. The communality of each variable was relatively high, ranging from 0.56 to 0.89. This indicates that the variance of the original values was captured fairly well by these five factors – food quality, service quality, price and value, atmosphere, and convenience.

#### *Regression Analyses*

To investigate whether the Institutional DINESERV Dimensions could be an influence on customer satisfaction, the customer satisfaction score was regressed on the factor scores. Then, in order to find out whether satisfaction could be an influence on customer return intention and word-of-mouth endorsement, the return intention score and word-of-mouth endorsement score were regressed on the customer satisfaction score.

Regression analysis was used to examine the relationship between customer satisfaction and the Institutional DINESERV Dimensions. The result, shown in Table 1, reveals that customer satisfaction is strongly correlated with the Institutional DINESERV Dimensions ( $R = .808$ ). This result indicated that the respondents had a positive and high level of satisfaction with food quality, service quality, price and value, convenience, and atmosphere. The adjusted  $R^2$  of this model is 0.651, which indicates that 65.1% of the variation in customer satisfaction was explained by the five dimensions.

To detect the presence of multicollinearity, the variance inflation factor (VIF) was calculated and presented in Table 1. No significant collinearity was detected. All five underlying dimensions (food quality, service quality, price and value, convenience, and atmosphere) were significant independent variables that influenced customer satisfaction in the university dining facilities. In other words, when we considered the relationship between satisfaction and the Institutional DINESERV Dimensions, all five underlying dimensions were found to be important constructs.

Based on the coefficient of each independent variable, it is possible to assess the impact of each variable on the dependent variable, customer satisfaction. According to Table 1, the variable "Food quality" was the most important determinant of college students' overall satisfaction; it had the highest coefficient value (0.438), and the highest t-value

(25.206). Service quality (Beta = 0.346), price and value (Beta = 0.296), convenience (0.161), and atmosphere (0.091) followed, in descending order of importance. Since all the dimensions turned out to be significant, the coefficient value is important.

Table 1  
Determinants of Satisfaction

Determinants of Satisfaction					
Dependent variable:	Customer satisfaction				
Independent variables:	Institutional DINESERV Dimensions				
Multiple R = 0.808; R <sup>2</sup> =0.653; Adjusted R <sup>2</sup> = 0.651; Standard error = 0.482; F = 287.545					
Independent Variable	b	Beta	t	Sig.	VIF
Constant			201.721	0.000**	
Food Quality	0.438	0.537	25.206	0.000**	1.09
Service Quality	0.346	0.425	19.939	0.000**	1.13
Price and Value	0.296	0.364	17.059	0.000**	1.04
Convenience	0.161	0.198	9.291	0.000**	1.20
Atmosphere	0.091	0.112	5.246	0.000**	1.15

\*\* p ≤ 0.01

The results of another regression analysis disclose that customer satisfaction has a strong correlation with return intention (R = .754). This result proves that the respondents had high satisfaction and high return intention, which means that the high satisfaction level translates into high return intention. A regression analysis was conducted to examine the impact of customer satisfaction on word-of-mouth endorsement. Word-of-mouth endorsement is shown to have a strong relationship with customer satisfaction (R = .834), indicating that a high satisfaction level will lead to positive word-of-mouth endorsement.

In summary, overall satisfaction has a significant positive effect in determining students' return intention and word-of-mouth endorsement. Institutional DINESERVE Dimensions are found to be positively related to customer satisfaction. The results also revealed that a high satisfaction level will lead to a high return intention and positive word-of-mouth endorsement.

### Discussions and Implications

Analysis of the Institutional DINESERV Dimensions survey of customer satisfaction by multiple regressions showed what one might expect: that good food and good service, and all related dimensions affect customers' opinions of their dining experience. The survey results made clear that food service operators should pay more attention to, and continue to improve, every aspect of their operation in order to meet and hopefully exceed their customers' expectations.

This study showed that food quality made the most critical impact in determining customer satisfaction. The food's quality, taste, freshness, and appearance were classified under the food quality dimension. Improvement of visual appeal might help food service operators meet or exceed customer expectations and intention to return. This result supports the previous findings of Pettijohn, Pettijohn, and Luke (1997) and Sulek and Hensley (2004). Service quality turned out to be the second most important element affecting customer satisfaction. Thus, university food service operators should continue to train their employees to maintain neat appearance, attentiveness, and knowledge about food, so they can deliver better service to students, staff, faculty, and even walk-in customers.

When analyzing customer satisfaction with return intention and word-of-mouth endorsement by multiple regression, the results showed that customer satisfaction has a significant effect on both. Weiss's (2003) study concluded that customer satisfaction with restaurant attributes is influential in predicting customers' intention to return. Also, Ranaweera and Prabhu's (2003) study of customer satisfaction and trust confirmed that both have a strong positive association with customer retention and positive word-of-mouth endorsement. As a result, the researchers believe that higher customer satisfaction will increase return intention and provide word-of-mouth endorsements of the university's dining facilities. This result sends the message to food service operators that they have to meet or exceed their customers' expectations to satisfy them and increase both customer return intentions, and word-of-mouth endorsements.

The findings have important implications for university food service operators regarding students' age group, type of meal plan, convenient location, and cafeteria design. First, university dining managers should recognize that students' age and type of meal plan may be related to their purchasing behavior. The results of the study indicated that people ages 31 and above, and faculty/staff meal plan holders, had higher levels of satisfaction. Most of the faculty/staff and graduate

students were in the 31 and above age group. The respondents in this age group have higher overall satisfaction, mostly because they prefer to dine on campus.

A convenient location and short walking distance to the dining facilities can influence faculty/staff and students' overall satisfaction. Most faculty/staff have one hour for lunch; and students might have twenty to thirty minutes before the next class. Therefore, with such a short lunch break, dining in the nearest facility would be the ideal situation. The convenience dimension may thus become a "salient" or "striking point" dimension in the mind of most students and faculty/staff. Food service operators should consider the convenience dimension before/when they open new outlets.

The studies also make it clear that food service operators should carefully design cafeteria interiors to deliver a relaxed and comfortable dining atmosphere—both to attract new customers and to increase the number of returning customers. Overall satisfaction levels, based on the Institutional DINESERV Dimensions, can increase the number of customers and their return intention, as well as generate positive word-of-mouth endorsement. The food service operators and management team also can use the customer survey to see the extent to which the attributes of the Institutional DINESERV Dimensions are satisfactory for all patrons of a dining facility. Improving customer satisfaction, return intention, and word-of-mouth endorsement in university dining facilities will not only strengthen customer loyalty; it will also improve the dining facility's reputation, and result in more sales and greater revenue in the long term.

### Limitations and Suggestions for Future Research

This study is limited in that a single university studied cannot be representative of all the universities in the United States. Also, the survey questionnaire was distributed during the week of final exams, and not everyone had the time to respond. Finals week is not only a difficult time to reach students but also a high-stress, emotional time period for students. This might affect students' attitudes and opinions as they took the survey. For future research, more attributes should be added to the Institutional DINESERV Dimensions to make the survey more precise and more applicable to the food service industry as a whole. Longitudinal studies are recommended, and variables, such as expenditure data, can be used to replace some of the current dependent variables..

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## Does Gender or Self-Other Agreement on Leadership Styles Improve Performance?

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### Abstract

This study employed the Path-Goal Leadership instrument to investigate whether different degrees of self-other agreement (agreement between managers' self-perceptions of leadership styles and subordinates' perceptions) on leadership styles improve performance, and whether managers' genders play a significant role on performance in the foodservice industry. Out of 273 anticipated participants for this study, 144 (52.75% response rate) were usable. The result showed that higher degree of self-other agreement on leadership styles lead to higher performance. The result also indicated that manager's gender is not what actually influences employee effectiveness and motivation. Recommendation for further research and implications are given.

**Key Words:** Path-Goal Leadership Styles, Managerial Self-Awareness, Perception, Motivation, and Performance.

### Introduction

Past studies have shown that managers' assessment of their own leadership style is not quite the same as the subordinates' perceptions (Atwater & Yammarino, 1992; London & Wohlers, 1991; Tsui & Ohlott, 1988). Past studies also indicated that superiors have a propensity to overrate their leadership styles above the perceptions of their subordinates (Ogbeide, 2005; Testa, 2001). "Leaders whose leadership self-ratings disagree with those of subordinates tend to be less successful in their job performance than those whose ratings agreed with those of their subordinates" (Testa, 2001, p.81). Such leaders also tend to have low managerial self-awareness (MSA) (e.g., Atwater & Yammarino, 1992; Church, 1997). MSA is "the ability to reflect on and accurately assesses one's own behaviors and skills as they are manifested in workplace interaction" (Church, 1997, p.281). Thus, managers with low MSA are probably susceptible to self-other disagreement on leadership styles. However, how much a difference in the degree(s) of agreement on leadership styles is enough to disrupt performance? And does gender play a significant role on self-other agreement? These are the questions this study attempts to answer.

### Literature Review

MSA or self-appraisal have been studied from different perspectives including focusing on self-rating and rating by others, biases of self-ratings, and how rater accuracy affect performance (Atwater & Yammarino, 1992). Some of the conclusions indicated by these studies include the following: Self-ratings are inflated due to social desirability biases (e.g., Podsakoff & Organ, 1986); Past studies that explored the psychological concept of self-awareness (e.g., Atwater & Yammarino, 1992; Church, 1997) indicated that, the greater the agreement between self assessment and those provided by direct report, peers, or subordinates, the greater a given individual's degree of MSA, which might consequently affect the performance of the organization, since the manager will be able to facilitate improvements that are needed in his/her organization. Many studies have been conducted about the comparison between leaders' self-perceptions and their subordinates' and peers' perception of leadership styles across many organizational sectors (Atwater & Yammarino, 1992; Becker, Ayman & Korabik, 2002; 1988; London & Wohlers, 1991; Testa, 2001).

The majority of studies within the industry focused on managerial roles of hospitality managers, types of leadership, and personality profiles of managers (e.g., Arnaldo, 1981; Ley, 1978; Nebel & Stearns, 1977; Shortt, 1989; Tracey & Hinkin, 1994; Tracey & Hinkin, 1996; Worsfold, 1989). Research in the hospitality industry has not investigated the relationship between leadership and organizational performance (Pittaway, Carmouche, & Chell, 1998). Past studies indicated that the way employees perceive hospitality's leadership has some influence on performance (Testa, 2001). Although many studies indicated complexity in measuring business performance due to multiple variables affecting organizational performance; however, the use of primary perceptual performance measures is broadly viewed as valid in many fields (Harris and Ogbonna, 2001).

Few studies examined the effects of gender on self-other agreement (London & Wohlers, 1991; Becker, et al 2002). The results of the above studies showed a contradictory role of gender on self-other agreement. While London & Wohlers (1991) found that the self-perception of male managers was less in agreement with those of their subordinates as compared to the female managers, Becker, et al (2002) found that the self-perception of female managers was less in agreement with those of their subordinates as compared to the male managers. Thus, past studies have not clearly showed the effect of gender on self-other agreement and/or performance, this study intends to add to this knowledge. Since employees' perception of leadership styles could affect performance, and given that the agreement between MSA and the perception of leadership styles of managers, as held by their subordinates, could affect performance. Hence, the importance

of knowing whether manager's gender and different degrees of self-other agreement on leadership styles improve performance in foodservice industry cannot be overemphasized.

There are two major theoretical frameworks for this study. The first theoretical framework is the Path-Goal Leadership (PGL) theory because of the following: Firstly, this theory was one of the first theories to identify four conceptual varieties of leadership styles (e.g., directive, supportive, participative, and achievement-oriented), which expanded the focus of prior studies that were focused on task-oriented and relationship-oriented behaviors (Jermier, 1996). Secondly, the theory received some support from many empirical research studies that have been conducted to test its validity. Thirdly, there is also the availability of a reliable PGL leadership instrument that was used to identify the leadership styles of the participants and their subordinates' perceptions in this study.

The second conceptual framework for this study is the concept of Managerial Self-Awareness (MSA). With the advent of 360-degree feedback systems in organizations—for enhancing self-knowledge and to improve managerial behaviors and/or styles (Church, 1997; Church and Bracken, 1997), Past studies indicated that the greater the agreement between self assessment and those provided by direct report, peers, or subordinates, the greater a given individual's degree of MSA. Greater degrees of MSA lead to greater performance (Bernardin, 1986; Burke, Richley, & DeAgelis, 1985; Shipper & Neck, 1990).

Hence, the purpose of this research was to investigate whether different degrees of self-other agreement on leadership styles improve performance, and whether manager's gender plays a significant role on performance in foodservice industry.

#### *Research question I*

Does self-other agreement on leadership styles significantly improve the performance of managers?

Hypothesis I

H1o: There is a significant relationship between self-other agreement on leadership styles and performance.

Hypothesis II

H2o: The higher the degree of self-other agreement on leadership styles the higher is employees' effectiveness.

#### *Research question II*

Does the gender of a manager have a significant effect on performance?

Hypothesis III

H3o: Gender of a manager has a significant effect on manager's performance.

### **Methodology**

This is a descriptive-correlational research design. The intent of the study was to investigate the influence of selected factors (gender and self-other agreement) on performance in foodservice industry. The study possesses characteristics of explore/describe, but it is elevated to explain/predict by the problem statement. This study was designed to investigate the leadership styles of foodservice managers and compare the managers' purported leadership styles to the perceptions of their styles held by their subordinates. The target population for this study is on-site foodservice student managers and subordinates at a large public comprehensive university in the Midwestern part of U.S.A. The sample selection for this study was a convenience sample of 273 student employees (10 managers, and 263 subordinates) of the institution. All the participating employees were holding a student status at the time of data collection. An informed consent letter with consent forms and the survey questionnaires were given to unit managers at their job site to help facilitate data collection from the student employees. The consent letter informed participants about the research and their right to participate or not to participate. Student employees who were willing to participate signed the consent form attached to each questionnaire, filled out the questionnaire and placed it in an envelope provided by the researcher for pick up.

A Path-Goal Leadership (PGL) instrument consisting of 20 questions regarding leadership styles was used for the study. This instrument was adapted from a PGL theory investigation of superior-subordinate relationships (Indvik, 1985, 1988; Northhouse, 2004). In addition, 12 questions regarding the demographic profiles of the participants, and three (3) questions regarding the performance of the managers were added. All the questions except the demographical questions were answered using a 7-point Likert type scale. The intent of the survey questions was to measure how much each manager agreed or disagreed that each statement represented his/her own leadership style. Similar questionnaires, which specifically inquire about the leadership styles of the subordinates' managers, were given to the subordinates. Survey questions also asked subordinates to agree or disagree to the extent each statement represented his/her manager's leadership

styles. The scoring and interpretation of collected data were based on the scoring guide provided for the leadership instrument (Northouse, 2004). The PGL instruments used for this study have been validated and found reliable by many studies (Northouse 2004). However, in order to make sure the data yielded consistent results, the degree of reliability per leadership styles were determined. The common measure of reliability is the Cronbach alpha and the usual criterion is Cronbach alpha coefficient of 0.7 (Hair, Anderson, Tatham, & Black, 1998; Harris & Ogbonna, 2001). A Cronbach's alpha coefficient of 0.7 and above indicates a high degree of internal consistency among the data collected (Harris & Ogbonna, 2001; Hsu et al., 2003). SPSS 13.0 version was used to conduct the reliability test and all other statistical analysis in this study. The reliability results of the Cronbach's alpha for this study indicated that the leadership instrument as a whole was reliable (Cronbach's alpha = 0.902, with 20 items of measures). In addition, the measures of the four different leadership styles had a satisfactory level of reliability over 0.7, except achievement oriented leadership style with 0.68. It was decided to keep the style in this study because it was very close to 0.7 and highly qualified for the lower level of acceptability between 0.6 - 0.7 (Hair et al., 1998).

The questionnaires were directly administered. Selection and frame error were avoided by obtaining an updated frame of student employees of the on-site foodservice establishment from their personnel office. This is a reliable frame since the personnel office updates it regularly. This frame was examined for duplicates making sure none of the students submitted two questionnaires. The degrees of self-other agreement were based on the number of subordinates' leadership styles perception (out of four—directive, supportive, participative and achievement-oriented) in agreement with each manager's perceptions. Zero degree denotes no agreement. One degree denotes agreement on the basis of only one leadership style. Two degrees denotes agreement on the basis of two leadership styles and so on. The independent variables were gender and self-other agreement. The dependent variable was performance. Performance was based on two questions pertaining to motivation and effectiveness of getting the job done. Data were analyzed using SPSS version 13.0 for windows; a product of SPSS Inc. MANOVA was used to determine whether manager's gender and different degrees of self-other agreement on leadership styles improve performance in foodservice industry.

## Results

Of 273, 144 surveys were returned and yielded a usable response rate of 52.75%. Of 143, ten respondents were managers and 133 were subordinates. In order to be sure there is no non-response error, non-respondents were further surveyed ("double-dipped") to examine the difference between the respondents and the non-respondents (Miller & Smith, 1983). This approach was used because it is generally preferred over the other techniques, and would produce the most empirically sound procedure (Miller & Smith, 1983). Non-respondents were contacted and asked to participate in the survey. This second data collection yielded 28 responses. Comparison of respondents to the double-dipped sample on the leadership styles showed no significant difference between the non-respondents and the respondents. This indicates that there is no non-response error in this study. Table 1 displays the numbers and percentages of agreements per degree of agreement. 13 (9.7%) subordinates did not agree with the managers on any of the leadership styles. 31 (23.1%) agreed on only one leadership style, 45 (38.6%) on two leadership styles, 26 (19.4%) on three leadership styles and 19 (14.2%) on four leadership styles.

Table 1

Leadership Styles Agreements between Managers and Subordinates

Degree of Agreement*	0 <sup>0</sup>	1 <sup>0</sup>	2 <sup>0</sup>	3 <sup>0</sup>	4 <sup>0</sup>	N
Number of Agreement	13	31	45	26	19	134
Percentage (%)	9.7	23.1	38.6	19.4	14.2	100.00

\* Degree of agreement was based on the number of leadership styles (out of four) the subordinates were in agreement with each manager's perceptions. Each degree denotes the number of leadership style(s) agreement.

## Hypothesis Testing

Table 2 displays the result of hypothesis I. The MANOVA result of hypothesis I (H1o: there is a significant relationship between self-other agreement on leadership styles and performance) indicated a significant relationship between self-other agreement and performance (motivation and effectiveness),  $F = 5.996$  for motivation and  $6.095$  for effectiveness,  $P < 0.001$  for both motivation and effectiveness.

Table 3 displays the result of hypothesis II. The MANOVA result of hypothesis II (H2o: the higher the degree of self-other agreement on leadership styles the higher is employees' effectiveness) indicated a significant relationship between degree of self-other agreement and effectiveness,  $P = 0.077$  for 1<sup>0</sup>,  $0.044$  for 2<sup>0</sup>,  $0.039$  for 3<sup>0</sup>, and  $0.011$  for 4<sup>0</sup>. Note: the lower the P value, the higher the degree of self-other agreement and the higher the degree of effectiveness.

Table 2  
Multivariate Analysis on Leadership Styles Agreements between Managers and Subordinates

Source	Dependent Variable	d.f.	$\chi^2$	F	P
Gender	Motivation	1	0.196	0.554	0.760
Gender	Effectiveness	1	0.228	0.531	0.712
Agreement	Motivation	4	12.517	0.544	<0.001
Agreement	Effectiveness	4	10.161	0.533	<0.001

Note.  $P < 0.05$  indicates statistically significant relationship between dependent (source) and independent variables.

Table 3  
Multivariate Analysis on Self-Other Agreements and Effectiveness

Dependent Variable	D	A	Mean Difference (A-D)	Std. Error	P
Effectiveness	0 <sup>0</sup>	1 <sup>0</sup>	1.65	0.554	0.077
Effectiveness	0 <sup>0</sup>	2 <sup>0</sup>	1.76	0.531	0.044
Effectiveness	0 <sup>0</sup>	3 <sup>0</sup>	1.81	0.544	0.039
Effectiveness	0 <sup>0</sup>	4 <sup>0</sup>	2.11	0.533	0.011

Note.  $P < 0.05$  indicates statistically significant relationship between self-other agreement and effectiveness  
D= degree of disagreement (no agreement), A= degree of agreement

Similarly, Table 4 displays the result of the MANOVA, which indicated a significant relationship between degree of self-other agreement and motivation,  $P = 0.090$  for 1<sup>0</sup>, 0.023 for 2<sup>0</sup>, 0.067 for 3<sup>0</sup>, and 0.007 for 4<sup>0</sup>. Note, the lower the P value the higher the degree of self-other agreement, the higher the degree of motivation, for the exception of 3<sup>0</sup> with P value higher than 2<sup>0</sup> P value. The result of the MANOVA also showed that 0<sup>0</sup> and 1<sup>0</sup> of self-other agreement on leadership styles are not significantly different from each other for both effectiveness and motivation.

Table 4  
Multivariate Analysis on Self-Other Agreements and Motivation

Dependent Variable	D	A	Mean Difference (A-D)	Std. Error	P
Motivation	0 <sup>0</sup>	1 <sup>0</sup>	1.73	0.602	0.090
Motivation	0 <sup>0</sup>	2 <sup>0</sup>	2.05	0.565	0.023
Motivation	0 <sup>0</sup>	3 <sup>0</sup>	1.81	0.596	0.067
Motivation	0 <sup>0</sup>	4 <sup>0</sup>	2.38	0.576	0.007

Note.  $P < 0.05$  indicates statistically significant relationship between agreement and motivation  
D= degree of disagreement (no agreement), A= degree of agreement

Table 2 also displays the result of hypothesis III. The MANOVA result of hypothesis III (H3o: Gender of the manager have a significant effect on manager's performance) indicated a negative relationship between gender and performance,  $F = 0.094$  for motivation and 0.137 for effectiveness,  $P = 0.760$  for motivation, and 0.712 for effectiveness, P value higher than 0.05 indicated no significant relationship between gender and performance (motivation and effectiveness).

## Discussion and Conclusion

This study investigated whether different degrees of self-other agreement on leadership styles affect performance, and whether manager's gender plays a significant role on performance in foodservice industry. The empirical test (MANOVA) supported the first and second hypotheses and rejected the third. As predicted, there was a significant relationship between self-other agreement on leadership styles and performance (Hypothesis I). The result of the first hypothesis contributed additional knowledge to the ideology that self-other agreement on leadership styles positively affects performance. The descending order of P values in Table 3 supported the predictions made in Hypothesis 2: the higher the degree of self-other agreement on leadership styles the higher is employees' effectiveness. This result further bolsters the result of the first hypothesis. Since self-other agreement on leadership styles have a significant effect on performance. It is not surprising to see that the higher the self-other agreement on leadership styles the higher the effectiveness. However, it is not quite the same for motivation. The higher the degree of self-other agreement, the higher the degree of motivation, for the exception of 3<sup>0</sup> with P value higher than 2<sup>0</sup> P value. One major difference that stood out between two degrees of self-other agreement and three degrees of self-other agreement was in the directive and supportive leadership styles. It was noted that three degrees of self-other agreement have a greater percentage of agreement on the



directive leadership styles than on the supportive leadership styles. Supportive leadership style is probably more attributed to motivation than directive leadership style. This part of the result suggests additional study on the relationship between self-other agreement on performance, and the effect of directive and supportive leadership styles on employee motivation.

With regards to Hypothesis 3, the result was very clear. There was no statistically significant relationship between gender and performance (motivation and effectiveness) in this study. This indicates that gender does not necessarily improve performance. Self-other agreement on leadership styles improves performance. It also supports the notion that greater MSA can lead to greater self-other agreement and consequently better performance. Therefore, regardless of your gender, so far you exhibit the leadership styles that resonate with your subordinates the better your chance of facilitating your subordinates for greater performance.

### **Implication, Limitation, and Future Research**

This study may not be generalized because the research subjects were student managers and student employees from one institution's campus dining services. Their demographic profile may not represent the typical workforces in some major hospitality industries. However, it contributes additional knowledge to the ideology that gender does not affect performance, leadership styles affect performance. Further study with larger population is suggested for generalizability, and further study on the relationship between self-other agreement on performance, and the effect of directive and supportive leadership styles on employee motivation is strongly recommended. Thus, continuing research in this area of study might add knowledge to the importance of upward feedback for reducing the discrepancies between leaders' and subordinates' perceptions on leadership styles.

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## Using College Students as Subjects in Experimental Study: Do Student Responses Reflect Those of Other Consumers?

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### Abstract

Using college students as research subjects in consumer research has been called into question. This paper addresses that concern by discussing external validity of research findings using student subjects as surrogates of consumers in experimental studies and testing for significant differences between student sample and customer sample in response to service experience. Results were mixed. No significant mean difference was found in complaint intention, overall satisfaction, and revisit intention toward service providers. However, significant discrepancies were observed in the test of role of initial satisfaction in evaluating recovery satisfaction and the relative importance of dimensions of justice.

**Key Words:** external validity, student sample, complaint intention, service recovery, satisfaction, revisit intention

### Introduction

As in a part of applied science, most researchers in the hospitality domain are interested in empirical findings that are meaningful to practitioners helping them make effective decisions and improve business practices. Consumer attitudinal and behavioral responses during and/or after service experiences are important in verifying cause and effect relationships. However, many of consumer behaviors in response to service experiences are not closely observable or measurable. Thus, researchers in hospitality and other service marketing employ pencil-and-paper experiments extensively to identify customer responses to various treatments (Goodwin & Ross, 1992; Mattila, 1999, 2001; Sundaram, Jurovski, & Webster, 1997). The method allows researchers to easily manipulate the nature of the service, the extent of the problem, and the situational factors by providing different levels of stimuli (Singh & Widing, 1991).

For both applied and theoretical experiments, research findings should generalize to other populations and settings (Lynch, 1982; Campbell & Stanley, 1963); however, a significant number of marketing and consumer behavior studies in hospitality/service settings have used college students as experimental subjects (Goodwin & Ross, 1992; McCollough, 2000; Sundaram et al., 1997; Webster & Sundaram, 1998), but using student subjects in laboratory experiments has caused some argument over the appropriateness of using student samples. Many research articles published in academic journals have been criticized as the “science of the sophomore” because of their heavy reliance on college students as surrogates for consumers (Hampton, 1979; James & Sonner, 2001). Despite the criticism, student samples as surrogates for non-student consumers are still widely used in consumer attitudinal and behavioral studies.

One major problem in the discussion of generalizability is that there are no commonly accepted standards for what characterizes proof of external validity (Mitchell, 1985). Little effort has been devoted to the issue in hospitality settings. Therefore, we assessed the applicability of research findings from student subjects to other customers. In this paper, we discuss the external validity of research findings using student subjects as surrogates for consumers in experimental studies; test for significant differences between student samples and customer samples in response to service experience.

### Review of Literature

#### *Experimentation and Validity Issue*

Experimental researchers attempt to discover causal relationships between treatment variables and dependent variables (Cook & Campbell, 1979; Perdue & Summers, 1986). If the manipulated independent variable(s) makes a difference to the dependent variables, researcher(s) will conclude that the manipulation contributes to the differences. Applied in marketing and consumer behavior studies, inferences drawn from the causal relationships enable researchers to provide a series of recommendations for making effective decisions and for improving business practices. This increased use of experimentation has also encouraged hospitality researchers to investigate casual relationships and to refine theories

(Lynn & Lynn, 2003; Oh & Parks, 1997).

Interpretable, meaningful results from experiments require two broad categories of validity: internal validity and external validity (Cook & Campbell, 1979). Ruling out extraneous factors (background factors) is an important task in discovering whether a treatment(s) makes a difference in dependent measures (Cook & Campbell, 1979). When these threats to internal validity (history, instrumentation, etc.; please refer Cook and Campbell (1979), for more discussion of common threats to internal validity) are not clearly ruled out, alternative explanations of the relationship between the cause and the effect exist (Mitchell, 1985).

External validity, on the other hand, refers to “the approximate validity with which we can infer that the presumed causal relationship can be generalized to and across alternate measures of the cause and effect and across different types of persons, settings, and times” (Cook & Campbell, 1979, p.37). Selecting of research subjects is relevant to how well research findings apply beyond subjects because of the threat of interaction of selection and treatment (Cook & Campbell, 1979). An appropriate sampling strategy, therefore, ensures external validity. Convenience sampling is popular among researchers to get a set of data in consumer research, but convenience samples should be related to the target population, with an adequate sample size for analysis and a representative sample of the population (Ferber, 1977).

#### *Student Samples as Experimental Subjects*

Generalizability of research findings derived from student subjects in an experimental setting to “real world subjects” has been recognized and debated in a variety of disciplines for more than five decades (Peterson, 2001). Convenience and the minimal costs of student samples as data sources are compelling incentives for researchers, particularly for academic researchers (Gordon, Slade, & Schmitt, 1986; Hampton, 1979; Hawkins, Albaum, & Best, 1977). However, these features do not justify using student samples for an experimental study instead of other customer groups. College students are not representative of the general population but are a selected group (Gordon et al., 1986; Landis & Kuhn, 1957). However, there are both proponents and opponents of using student samples as experimental subjects.

#### Proponents

One group of researchers argue that using students as experimental subjects does not falsely represent research findings: students are reasonable surrogates for other consumers. The use of student samples in marketing and consumer behavior studies is justified for a number of reasons. In theory application studies, a homogeneous respondent population is preferred (Lynch, 1982; Winer, 1999). Lynch (1999) suggested that findings from a single-real world setting with sets of “real” people are not more generalizable than findings from a single setting with student subjects. He pointed out that research using somewhat random sampling method from the true population of interest (heterogeneous “representative” samples to increase external validity) leads to inflated “error” variance because background factors have been ignored. Students as research subjects, however, display similar characteristics. Thus, college students exhibit “less variation within a scale (smaller standard deviations) and more consistency across scales (higher correlations) than do non-students” (Peterson, 2001, p. 454). These facts translate into strong hypothesis tests because extraneous variation associated with college students is less than in non-students groups (Lynch, 1982; Peterson, 2001). Students have strong cognitive skills that prevail in laboratory experiments (Sears, 1986; James & Sonner, 2001). Further, the use of student samples can be justified on the grounds that the respondents are “real-life consumers” and familiar with the hospitality and tourism context (Collie, Sparks, & Bradley, 2000; Mattila, 2001).

#### Opponents

The use of student subjects has been opposed because students may not be representative of general customers. Students and non-students differ in skills, personality traits, and experience, and student samples usually come from a very narrow age range and from the upper levels of educational background (Sears, 1986; Wells, 1993). Moreover, students tend to comply with authority and cooperate with researchers, usually teachers in their school environment, which may skew responses and thus, findings (James & Sonner, 2001; Peterson, 2001; Sears, 1986). Such characteristics may lead students to respond to treatments differently from non-students and thus change the direction of relationships or the strength of effects. Therefore, research findings may not apply to general customer groups.

#### *Research Findings in the Literature*

Study findings are somewhat mixed. Gordon et al. (1986) reviewed thirty-two studies where both students and non-students participated as subjects under identical conditions. Among 22 quantitative studies, 16 studies reported at least one statistical, between-subject difference. However, many earlier studies compared student samples as the direct surrogate of a distinct group. For example, Cunningham, Anderson, and Murphy (1974) found significant differences in the means of socio-psychological variables between household samples and student samples. They concluded that students are not good surrogates for household consumers’ socio-psychological attributes. Such findings provided evidence for opponents of

research using college students as surrogates of non-student consumers. However, a dramatic shift has occurred in the characteristics of students. For example, student gender ratios have changed and the percentage of non-traditional students has increased. See Peterson (2001) for more discussion of the findings of behavioral and psychological relationships. They report second meta analysis on homogeneity and effect sizes from several meta-analyses.

#### *An Experimental Study*

Using student samples in scenario based experimental research in hospitality studies has proliferated. However, no attempt has been made if there exist significant discrepancies between student samples and customer samples in hospitality research by directly comparing the two samples. This study will test for differences between student samples and customer samples as they respond to service experiences (a service failure/recovery situation).

Researchers have indicated that demographic characteristics are related to complaint behavior (Day & Landon, 1977; Lam & Tang, 2003). Two characteristics are salient in student samples: age and level of education. This study tested for significant differences in complaint intentions compared to non-student counterparts. Researchers have indicated that customers who are satisfied with service providers are apt to perceive the service performance as better. This study tested for differences in recovery evaluation among different levels of customer initial satisfaction after controlling for recovery scenarios (Are your initially satisfied customers more satisfied with your recovery efforts?).

In an effort to redress customers' voiced complaints, service providers try to recover customers' perceived inequity by providing extra inputs. According to the three dimensional view of justice, consumer evaluation of recovery efforts is determined by the perceived fairness of the outcome (distributive justice); the perceived fairness of the manner in which the complaint is handled (interactional justice); and the process by which rewards are dispensed (procedural justice; Blodgett, Granbois, & Walters, 1993; Blodgett, Hill, & Tax, 1997). The three dimensions of justice collectively account for more than 60% of the explained variation in encounter satisfaction in both restaurant and hotel settings (Smith, Bolton, & Wagner, 1999). In confirming the justice theory, this study proposes that the three dimensions of justice will have significant main effect on recovery satisfaction.

Managers of service entities, in addition, may be interested in the relative importance of the dimensions of justice. However, generalizing findings from student samples to specific populations may not be appropriate because students may give more weight to certain attributes than other restaurant customer groups do (Smith & Bolton, 2002). For example, students give more weight to monetary compensation than other segments of customers in evaluating service recovery. In response to the proposed query, this study tests the three dimensions of justice to see if they equally effective in recovery satisfaction for both customer group and student group.

### **Methodology**

#### *Subjects and Data Collection*

Gordon et al. (1986) contend that the most persuasive evidence of generalizability of research findings using student subjects can be found in published empirical studies that collected data from both student and non-student subjects under identical experimental conditions. Using Gordon et al.'s (1986) recommendation, this study selected two convenient sample groups: restaurant customers and undergraduate students at a midwest university.

For the non-student group, six hundred copies of a survey packet were distributed to individuals who showed interest in participating in the study during community fund raising events, educational programs, or regular meetings of participating groups. A total of 286 responses were obtained out of 308 questionnaires returned (47.67% usable response rate). Student participants were drawn from courses in a hospitality program at a midwest university. To obtain data from various disciplines, elective courses were preferred, and data were collected during classes. Responses from student participants numbered 277, and 266 were retained for data analysis. Both nonstudent and student participants were asked to read a service failure scenario describing a dining experience. The service failure scenario described as follows:

You and your family went out for dinner at a restaurant to celebrate one of your family member's graduation from high school or college. .... You ordered a steak and requested it to be cooked "medium." When your meal was served, you noticed that your steak was "overcooked." You informed your server that your steak was overcooked.

Eight recovery scenarios responded the manipulations of dimensions of justice into two levels each (high versus low). Participants were randomly assigned one of the eight recovery scenarios. Each scenario was identical except for the description of manipulations; an example (high interactional justice, low procedural justice, and low distributive justice) is noted below:

After you explained the problem to the server, he sincerely apologized for the problem. He said that he could not do anything about the problem and would get a manager to resolve it. After 10 minutes, the manager approached you and apologized for the problem. The manager asked you what the problem was and you had to re-explain the problem. She also explained why the problem happened. She informed you that another steak would be served. No other compensation was offered. She asked if there was anything else that she could do to serve you better.

### *Measures*

Complaint intentions were measured by asking participants the magnitude of their intention to complain when they experienced poor service. For the following measures, respondents were asked to indicate their level of agreement on multi-evaluative items anchoring from 1) strongly disagree to 7) strongly agree. Initial overall satisfaction and revisit intentions were measured before the failure scenario and recovery scenario were presented. Initial overall satisfaction scale, adapted from Oliver and Swan's measure (1989) asked about overall satisfaction, happiness, and pleasure. Revisit intentions, adapted from Maxham and Netemeyer (2002) and Blodgett et al.'s (1997) scales, were evaluated by assessing whether respondents were likely to dine out in the near future. Measurements of dimensions of justice were adapted from those of Blodgett et al. (1997), Maxham and Netemeyer (2002), and Smith et al. (1999). Evaluations of the perceived outcome fairness; the perceived fairness of procedures and timely responsiveness; and apology, explanation, and concern toward customers were asked for distributive justice, procedural justice, and interactional justice, respectively. Recovery satisfaction, adapted from Maxham and Netemeyer (2002) and Brown, Cowles, and Tuten (1996), was measured after a service failure scenario and a service recovery scenario were presented. Particular emphasis was given to the statements (e.g., providing a satisfactory resolution to the problem on this particular occasion) because it measures a transaction evaluation (service recovery). Reliability of the measurements was estimated using Cronbach's coefficient alpha, and values were well above the suggested cutoff of .70 (Nunnally, 1978).

### **Data Analysis and Results**

Because the study was intended to compare measures of nonstudent and student groups, it was desired to have the composition of age categories as close as possible to that of general restaurant customers. We compared the age distribution in our study with the national age distribution reported in the U.S. Census. The percentage of the age category of 18 to 24 in the customer sample in this study was substantially larger than the national average, and the percentage of the age category of 65 years and over was lower than reported in the U.S. Census 2000. Then, we randomly selected 17 respondents of those who reported themselves as college students at the age of 18 to 24 and combined with the student group. Because those in the age category 65 years and over are less likely to dine out, we kept that number as collected.

The customer respondents consisted of 59.9% female ( $n = 161$ ) and 39.0% male ( $n = 105$ ). The sample was primarily Caucasian/white (84.0%,  $n = 226$ ). The mean age of the customer sample was 43.96 years ( $SD = 15.93$ ). The age category of 45 to 54 accounted for the highest (24.2%) numbers of respondents and the 65 and over group was the lowest (10.0%).

Of the 266 student responses initially obtained, hospitality major students represented 40.2% ( $n = 107$ ). Other majors enrolled in the classes were from more than 30 different disciplines because the classes were undergraduate general education courses. The student respondents, combined together with 17 students from the customer group consisted of 39.6% male ( $n = 112$ ) and 58.0% female ( $n = 164$ ). Most of the students (92%,  $n=253$ ) were Caucasian/White. The mean age of the student participants was 21.26 years ( $SD = 2.1$ ). The age of the student respondents ranged from 18 to 38, and 93.5% were between 18 and 22 years old. Table 1 presents further information on the characteristics of participants.

### *Complaint Intention*

To determine the significance of mean difference of complaint intentions of the two groups, *t*-test was performed. There were no mean differences between students and customers in their complaining attitude. The non-student and student groups showed no significant mean difference in their complaint intention (mean difference = 0,  $t = -.021$ ,  $p = .983$ ) when they experienced poor service. The non-student group was more likely to complain to managers (mean = 4.76) than the student group (mean = 4.51), but a statistically significant mean difference was not found ( $t=1.74$ ,  $p = .082$ ). The student group did have smaller standard deviations than the non-student group. Table 2 provides means and standard deviations of measures. Chi-square tests were performed to compare the distribution of responses by the two groups; no significant differences were found ( $p = .535$  for complaint intention, and  $p = .466$  for complaint intention to a manager or an employee).

Table 1  
Characteristics of research participants

		Customers (n=269)		Students (n=283)	
		Frequency	Percent	Frequency	Percent
Age	18-24	39	14.5	263	95.6
	25-34	46	17.1	11	4.0
	35-44	49	18.2	1	0.4
	45-54	65	24.2	.	.
	55-64	38	14.1	.	.
	65 and over	27	10.0	.	.
Education	Less than high school	2	0.7	.	.
	High school	28	10.4	.	.
	Some college	72	26.8	283	100
	College graduate	79	29.4	.	.
	Graduate degree	84	31.2	.	.
Income	Less than \$20,000	49	18.2	NA	NA
	\$20,000-\$39,999	55	20.4	NA	NA
	\$40,000-\$59,999	54	20.1	NA	NA
	\$60,000-\$79,999	38	14.1	NA	NA
	\$80,000-\$99,999	20	7.4	NA	NA
	Over \$100,000	49	18.2	NA	NA
Ethnic Background	African American	14	5.2	5	1.8
	Asian	16	5.9	3	1.1
	Caucasian/White	226	84.0	253	92.0
	Multi-racial	5	1.9	3	1.1
	Hispanic	3	1.1	9	3.3

Note. Two to eight respondents did not indicate their personal information.

Table 2  
Complaint intention

	Non-students (n = 269)		Students (n = 283)		t-value
	Mean	Std. Deviation	Mean	Std. Deviation	
Complaint Intention <sup>a</sup>	4.16	1.89	4.16 <sup>c</sup>	1.76	-.021
Complaint Intention to <sup>b</sup>	4.76	1.67	4.51	1.65	1.74

<sup>a</sup> I am usually reluctant to complain to restaurant employees/managers regardless of how poor the service is (1=strongly disagree, 7=strongly agree).

<sup>b</sup> In general, I prefer to complain to a manager than to an employee (1=strongly disagree, 7=strongly agree).

<sup>c</sup> Values are based on 282 observations.

#### *Relative importance of Justice Dimensions*

The three dimensions of justice had significant positive effects on service recovery satisfaction for both student and customer samples (see Table 3). The three dimensions of justice accounted for a significant amount of the explained variation in recovery satisfaction in both student and customer samples (adjusted *R*-square value of 0.76 for customer

sample and 0.79 for student sample). Although some researchers have indicated that students are different from other customers in their responses to service experiences, this finding may indicate that the use of students may not be problematic in concluding that appropriate service recovery efforts through dimensions of justice leads to customer recovery satisfaction.

However, this study found that using students as a direct surrogate for customers could be misleading for specific research hypotheses/questions. For the customer sample, procedural justice had the most significant effect on recovery satisfaction, followed by distributive justice and interactional justice. On the other hand, for the student sample, distributive justice had the most significant effect on recovery satisfaction, followed by interactional justice and procedural justice. Therefore, generalizing study findings from the student sample to customers may not be appropriate in relative importance of dimensions of justice. Table 3 provides regression coefficients for both customer and student samples.

Table 3  
Regression coefficients

Dimensions of Justice	Customers (n=269)				Students (n=283)			
	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>
	B	Std. Error	Beta		B	Std. Error	Beta	
Interactional	.270	.053	.258	5.06**	.317	.047	.313	6.74**
Procedural	.361	.049	.367	7.39**	.136	.048	.133	2.81*
Distributive	.370	.048	.343	7.75**	.553	.050	.516	11.14**

Dependent Variable – Service recovery satisfaction

\*  $p < .01$ , \*\*  $p < .001$

#### *Recovery Evaluation, Satisfaction, and Revisit Intention*

In evaluating student and non-student samples for overall satisfaction and revisit intention toward all restaurants they recently visited, overall, the two groups showed no significant mean difference in their overall satisfaction ( $t = .271$ ,  $p = .103$ ) and in their revisit intention ( $t = .603$ ,  $p = .364$ ). Because having participants name restaurants might bias the results, further analyses were performed on the two most frequently named restaurants. As shown in Table 4, there were no significant mean differences between the two groups in each restaurant. Note that customers have higher overall satisfaction and revisit intention toward brand A restaurant, and students have higher overall satisfaction and revisit intention toward brand B restaurant.

The ANCOVA (in Table 4) result indicates that the main effects of covariates (the effects of recovery scenarios) on recovery satisfaction were significant ( $F = 99.20$ ,  $p < .001$  for the non-student group, and  $F = 70.32$ ,  $p < .001$  for the student group). The variances explained by the scenarios provided were large for both groups ( $\eta^2 = .28$  for the non-student group, and  $\eta^2 = .21$  for the student group). The main effect of initial overall satisfaction was not significant ( $F = 2.58$ ,  $p = .054$ ) for the non-student sample. On the other hand, the main effect of initial overall satisfaction was significant ( $F = 7.65$ ,  $p < .001$ ) for the student sample. The variances explained by initial overall satisfaction,  $\eta^2$ , were small to medium for the non-student sample (about 3%) and for the student sample (about 8%).

#### **Summary and Suggestions for Future Study**

This study found that study findings may generalize from student samples to customers for theory based overall research questions/hypotheses. It is, therefore, wrong to conclude that students are different from non-students. However, the use of students as a direct surrogate of customers could be misleading for specific research questions/hypotheses. Therefore, generalizing study findings from student samples to customers may not be appropriate for specific relationships.

As Greenberg (1987) pointed out, external validity is not achieved in any one study, but necessitates evaluations of different studies; future researchers demonstrate generalizability through comparisons. Cumulative knowledge from various researchers and from various methodologies give meaningful information to practitioners (Piccoli & Wagner, 2003). In other words, meta-analysis of existing body of literature delivers generalized quantitative estimates for parameters of buyer behavior (Farley, Lehmann, & Sawyer, 1995).

Refusing to use student samples may not be appropriate. Cook and Campbell (1987) recommended distinguishing



“generalizing to” target populations versus “generalizing across” multiple populations or subgroups. Research findings based on student samples work as long as researchers can justify the use of student subjects in the study of causal relationship. However, it is clear that researchers should report limitations when extrapolating the results to a particular subgroup.

This study performed comparative evaluations in complaint attitude and service recovery as an effort to provide evidence about generalizing results from student convenience samples to restaurant customers. Further study is necessary in various topics and settings to provide further enlightenment on the issues.

Table 4  
Pre-recovery overall satisfaction, recovery satisfaction, and post-recovery overall satisfaction, satisfaction and revisit intention

	Brand A					Brand B					All Restaurants				
	Non-students (n = 47)		Students (n = 68)		<i>t</i>	Non-students (n = 21)		Students (n = 49)		<i>t</i>	Non-students (n = 269)		Students (n = 283)		<i>t</i>
	Mean	s.d.	Mean	s.d.		Mean	s.d.	Mean	s.d.		Mean	s.d.	Mean	s.d.	
Pre-recovery															
Overall	5.84	.87	5.63	1.08	1.081	5.54	1.10	5.90	.95	-1.390	5.65	1.18	5.63	1.36	.271
Satisfaction															
Revisit Intention	6.35	.84	6.10	1.12	1.272	5.95	1.38	6.42	.68	-1.885	6.08	1.35	6.01	1.32	.603

#### ANCOVA results for initial overall satisfaction

Source	Non-students						Students					
	Type III sum of squares	df	Mean Square	F	Significance	$\eta^2$	Type III sum of squares	df	Mean Square	F	Significance	$\eta^2$
Corrected Model	184.14	4	46.03	25.42	.000	.28	170.98	4	42.74	25.87	.000	.28
Intercept	1444.17	1	1444.172	797.59	.000	.76	1079.07	1	1079.07	653.05	.000	.71
Recovery Scenarios	179.61	1	179.61	99.20	.000	.28	116.20	1	116.20	70.32	.000	.21
Initial Overall Satisfaction	13.99	3	4.67	2.58	.054	.03	37.91	3	12.64	7.65	.000	.08
Error	463.53	256	1.81				449.44	272	1.65			
Total	7079.67	261					6945.67	277				
Corrected Total	647.67	260					620.42	276				

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## Hotel Branding Strategy and Market Value from an Owner Perspective

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### Abstract

While the relationships between hotel brands and customer satisfaction and loyalty have been widely researched, this study expands on existing research by exploring the effect of hotel brands on market values. The results provide evidence that hotel market values are significantly affected by hotel brands.

### Introduction

In the hotel industry, the proliferation of new brands has drastically altered the lodging landscape in recent years. In the most recent annual brand report of *Hotels* magazine, there are 285 lodging brands worldwide (*Hotels*, 2005). Depending on how a “new brand” is defined, six to eight new brand names, including aloft and NYLO, were introduced to the market in 2005 (Watkins, 2005). It is generally recognized that brands create value for both consumers and companies (Aaker, 1991). Consumers use brands as cues to infer certain product attributes, such as quality. Because loyal customers are less price-sensitive, more willing to purchase more, and generate positive word-of-mouth, corporate management has realized that brand names are among the most important assets of a company (e.g., Anderson & Mittal, 2000; Kapferer, 1997).

Previous research has also suggested that brand affiliation is an important contributor to hotel value (e.g., Walsh, 2003a). Although different valuation methods are applied to assess hotel market value, it has been widely regarded that the process of estimating hotel market value is as “art” as well as “science.” A number of financial indicators, such as net operating income (NOI), average daily rate (ADR), occupancy rate, and number of rooms, have proven to be among the most significant predictors of hotel market value (e.g., O'Neill, 2004; O'Neill & Lloyd-Jones, 2002). In the mean time, we believe that it is vital for hotel owners, operators, and analysts to understand the effects of hotel brands on the market value of hotels.

### Hotel Branding and Market Value

Hotel investors apply different valuation methods to assess the market value of a hotel; market value is essentially an estimate of the likely sale price of real estate in a free and open market. In addition to the sophisticated appraisal approaches (i.e., cost approach, sales comparison approach, and income capitalization approach) that are most commonly used by commercial real estate appraisers, hotel investors also adopt simpler and more expeditious methods such as the ADR rule of thumb, which suggests that hotels should generate \$1 in ADR per \$1,000 in value per room (deRoos & Rushmore, 2003; O'Neill, 2003). Moreover, hotel automated valuation models (AVMs) are also commonly used for this purpose. According to O'Neill (2004), among a number of factors that have been suggested to be related to hotel market values, AVMs have revealed that NOI per room, ADR, occupancy rate, and number of rooms are the four most significant factors in predicting hotel values, while the effects of other important indicators such as capitalization rate, location, and property age are effectively captured by these four key factors.

It has also been suggested that brand affiliation is linked to hotel value (e.g., Keeling, 2001; O'Neill & Belfrage, 2005). In particular, it is believed that branded hotels have a financing edge. Since chain affiliation is incorporated in lenders' tight formulas from which to underwrite loans, obtaining financing for an independent hotel is generally more difficult than for a branded one. It has been suggested that more stringent underwriting criteria, such as lower loan-to-value ratios, higher interest rates, etc., are common in the financing of an unflagged property (Keeling, 2001). However, while the power of hotel branding on hotel value has been frequently cited in trade magazines, it has not been subjected to rigorous academic research. Exactly how brand contributes/diminishes hotel market value remains unstudied.

### Methodology

To examine the role of brand names on hotel market values, this study uses a database drawn from over 2,500 hotel sale transactions from 1990 through 2005 and comprising 1,233 transactions with complete hotel operating and descriptive information. For the 12-month period prior to each transaction, the database includes ADR (mean = \$92.91), occupancy rate (mean = 65.8 percent), and NOI (mean = \$8,044 per room), as well as sale price (mean = \$84,868 per

room), capitalization rate (mean = 9.55 percent), and room revenue multiplier or RRM (mean = 3.46). Other information in the database includes the number of guest rooms (mean = 210), property age (mean = 20 years old), location (city, state, and region), hotel type (economy, midscale without F&B, midscale with F&B, upscale, upper upscale, and luxury), and brand affiliation. Each hotel brand was categorized into the respective hotel type as defined by Smith Travel Research. We applied Smith Travel Research's definitions of hotel types both because they are independent of our research and because they are well accepted and well regarded in the hotel industry.

For the purpose of this research, brands with fewer than three sales transactions were excluded because we believe those transactions are not able to fully represent the corresponding brands. Furthermore, transactions representing independent properties were excluded due to the difficulty and potential inaccuracy of coding them appropriately into the hotel types defined by Smith Travel Research. Such selection resulted in 1,067 hotel sale transactions, representing 47 brands of the top 100 brands reported by *Hotels* (2005). A description of the sample is shown in Table 1 and all brand names are provided in Table 3.

Table 1  
Sample Characteristics

Hotel Type	Brands	Hotels	Percentage
Economy	5	68	6.37%
Midscale without F&B	9	219	20.52%
Midscale with F&B	7	188	17.62%
Upscale	14	302	28.31%
Upper Upscale	8	266	24.93%
Luxury	4	24	2.25%
Total	47	1,067	100.00%

Analysis of covariance (ANCOVA) was conducted to examine the effects of brand on hotel sale price, i.e., market value, measured as sale price per room. Because NOI per room, ADR, occupancy rate, and number of rooms have been revealed in AVMs as significant predictors of hotel market values, their effects are regarded as pre-existing and consequently should be controlled to precisely assess the effects of brand. ANCOVA was conducted in three steps: the entire dataset, the entire dataset with brands nested inside the six different hotel types defined by Smith Travel Research, and each of the six hotel types. In the last step, Tukey's multiple comparison tests were conducted to examine the pair wise difference between brands.

## Results

We first tested the overall brand effects on hotel market values by conducting ANCOVA on the entire dataset. Sale price per room of each transaction was the response variable in the model, where brand was the predictor, and NOI per room, ADR, occupancy rate, and number of rooms were covariates. The results clearly show that, while all four control variables are statistically significant (which is consistent with previous research), brand also has a significant effect on price per room and accounts for a considerable increase in R-square (Change in R-square = 0.075,  $F = 39.10$ ,  $p < .001$ ).

Previous research has also suggested that hotel market values differ significantly by hotel types (e.g., Singh & Schmidgall, 2000). To examine whether the previously revealed significant effects of brand are indeed due to the variances among different hotel types, we re-conducted ANCOVA but nested brands inside the six hotel types defined by Smith Travel Research to test the effects of brands within hotel types (i.e., economy, midscale without F&B, midscale with F&B, upscale, upper upscale, and luxury). The results again support the significant effects of the brands within hotel types on a price per room basis while taking into consideration the effects of the previously mentioned four key predictors ( $F = 9.70$ ,  $p < .001$ ).

Moreover, to gain further insight into how brands influence price per room in different hotel types, we applied separate ANCOVA tests for each of the six hotel types. In the meantime, to scrutinize which brands are particularly different from the other brands within the same type, we conducted Tukey's multiple comparison tests to examine the pairwise difference between brands. Again the four financial predictors (i.e., NOI per room, ADR, occupancy rate, and number of rooms) were controlled as covariates in each ANCOVA test. As shown in Table 2, the results of the six ANCOVA tests reveal that the mean value of price per room does vary significantly across brands among the midscale (with and without F&B), upscale, and upper upscale hotels. However, there are no significant brand effects on either economy hotels or luxury hotels. That is, the midscale and upscale brands do significantly affect the hotel market values in

their respective segments, while hotel market values are not significantly influenced by the brands in either the economy or luxury segments. The mean sale price per room of each specific brand is provided in Table 3.

Table 2  
Brand Effect on Mean Price per Room by Hotel Type

	<b>Economy</b>	<b>Midscale w/o F&amp;B</b>	<b>Midscale with F&amp;B</b>	<b>Upscale</b>	<b>Upper Upscale</b>	<b>Luxury</b>
N	5	9	7	14	8	4
Mean	\$28,148	\$53,112	\$42,085	\$83,141	\$109,916	\$322,305
Median	\$29,998	\$49,480	\$46,875	\$78,790	\$109,363	\$326,797
Std. Dev.	\$9,104	\$16,413	\$12,762	\$16,267	\$24,936	\$65,545
Minimum	\$13,080	\$31,136	\$25,975	\$60,728	\$74,955	\$241,262
Maximum	\$35,504	\$86,511	\$53,126	\$108,885	\$150,320	\$394,366
F value	0.21	2.30*	2.38*	3.15**	4.41**	0.43

\* p < .05.

\*\* p < .01.

Table 3  
Mean Price per Room by Brand

<b>Brand</b>	<b>Mean Price per Room</b>	<b>Brand</b>	<b>Mean Price per Room</b>
<b><i>ECONOMY</i></b>		<b><i>MIDSCALE WITHOUT F&amp;B</i></b>	
Cross Country Inn	\$13,080	AmeriHost	\$52,905
Days Inn	\$34,940	Comfort Inn	\$43,212
Microtel	\$29,998	Country Inn & Suites	\$70,735
Super 8	\$27,221	Fairfield Inn	\$31,136
Travelodge	\$35,504	Hampton Inn	\$54,169
<b><u>Segment mean</u></b>	<b><u>\$28,148</u></b>	Holiday Inn Express	\$49,480
		Sleep Inn	\$44,649
		TownePlace Suites	\$86,511
		Wellesley Inn	\$45,219
		<b><u>Segment mean</u></b>	<b><u>\$53,112</u></b>
<b><i>MIDSCALE WITH F&amp;B</i></b>		<b><i>UPSCALE</i></b>	
Best Western	\$53,126	Adam's Mark	\$70,070
Clarion	\$50,585	AmeriSuites	\$80,680
Holiday Inn	\$46,875	Courtyard	\$94,890
Howard Johnson	\$25,975	Crowne Plaza	\$62,365
Ramada	\$28,670	Four Points	\$75,352
Red Lion	\$57,074	Hawthorn Suites	\$60,805
Quality Inn	\$32,288	Hilton Garden Inn	\$92,890
<b><u>Segment mean</u></b>	<b><u>\$42,085</u></b>	Homewood Suites	\$102,122
		Radisson	\$60,728
		Residence Inn	\$108,885
		SpringHill Suites	\$85,343
		Staybridge Suites	\$76,901
		Summerfield Suites	\$103,769
		Wyndham	\$89,617
		<b><u>Segment mean</u></b>	<b><u>\$83,141</u></b>
<b><i>UPPER UPSCALE</i></b>		<b><i>LUXURY</i></b>	
Doubletree	\$74,955	Fairmont	\$394,366
Embassy Suites	\$108,812	Four Seasons	\$350,115

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Hilton	\$106,489	InterContinental	\$241,262
Hyatt	\$130,373	Ritz-Carlton	\$303,480
Marriott	\$109,915	<b><u>Segment mean</u></b>	<b><u>\$322,305</u></b>
Renaissance	\$119,710		
Sheraton	\$78,761		
Westin	\$150,320		
<b><u>Segment mean</u></b>	<b><u>\$109,916</u></b>		

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### Discussion And Implications

The findings of this study indicate the existence of brand effects on hotel market values. In addition to the well recognized value predictors in hotel AVMs (i.e., NOI per room, ADR, occupancy rate, and number of rooms), brand affiliations contribute significantly to the variances of hotel values. The findings support the notion that the brand matters in assessing a hotel's value. However, how the brand matters, and how much are such brand effects vary across hotel types.

It is interesting to find that brands influence the hotel values more in midscale and upscale hotels than in the most inexpensive (economy) and expensive (luxury) hotels. One possible explanation based on our further scrutiny of the data is that perhaps the most and least active, innovative, and well positioned brands are in the midscale and upscale segments, i.e., there is a great deal of variance in the brands in the middle of the price range, but much less variance in the brands at the top and bottom of the price range. In the following section, we discuss specific brands that, based on the results of Tukey's multiple comparison tests, have significantly higher or lower prices per room compared to other brands in their respective segments.

Considering the results of the four hotel types in which brands significantly influence hotel values, it appears that some of the most innovative and well positioned brands, such as Residence Inn, Courtyard, and Westin, have established competitive advantages over their less well positioned competitors in their respective market segments. Specifically, it may be that Radisson and Doubletree, similar to Howard Johnson and Ramada in the midscale category, have confusing guest perceptions of their brand images, and consequently, have been continuously ranked among the lowest in terms of brand awareness (Morrison, 2004). The findings of our study suggest that such brand awareness disadvantages may be reflected in the hotel market values of the respective brands, as well. On the other hand, while Sheraton remains strong in terms of brand awareness among hotel guests, the system's "upgrading" efforts, similar to Fairfield Inn's, may partially contribute to the relatively lower market value shown in our study. Recent trends suggest that Sheraton has successfully implemented several key strategies including upgrading quality standards, improving guest satisfaction, introducing an attractive prototype to expand into smaller markets, and joining Westin's bedding innovation with its Sweet Sleeper bedding product, all of which have led to strengthen the brand's market position and to create more value for hotel investors. Consequently, Sheraton has been able to resume its growth speed, has become one of the top ten new development leaders in 2005, and may serve as an interesting model for brands such as Ramada, Howard Johnson, Doubletree, and Radisson (e.g., Watkins, 2005; Webb, 2004; Paterik, 2002).

While the findings of this study are believed to add to our understanding of the relationship between hotel brands and market values, how to appropriately assess the effects of a brand is a complex task for hotel owners. In the lodging industry, hotel brands are clearly linked to multi-dimensions, such as physical facilities, amenities, and service qualities and styles. Our research aims to contribute to the knowledge regarding the factors determining the value of hotels; however, it does not simply mean that a brand's relationship with hotel market value is the only benefit a brand brings to hotel owners. Although it is important for hotel owners to be able to recognize the effects of a brand on hotel market value, other benefits associated with a brand should be considered to fully assess the total value of the brand.

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## **Determinants of the Travel Demand Model for Mexican Tourists to the U.S.A.**

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### **Abstract**

The objective of this study was to identify the determinants of the travel demand and to assess their impacts on the number of international tourist arrivals from Mexico to the U.S. Annual time data (1986-2004) of tourist arrivals, real per capita income, relative prices and real exchange rates were used throughout the study. Dummy variables of 9-11, 1996 Atlanta Olympic Games, Gulf and Iraq war, and world Economic Recession were used to measure the impacts of special incidents on the number of Mexican arrivals. Multiple regression analysis was used to analyze the data. The result showed that real per capita income, relative price, exchange rate, and economic recessions in 1987, 1991 and 2001 were the determinants of the travel demand from Mexico to the U.S.

Key Words: U.S. inbound market, Mexico, travel demand, multiple regression.

### **Introduction**

For about forty years, the U.S. inbound market has been dominated by five major destination countries which are Canada, Mexico, United Kingdom, Japan, and Germany. It is worth noting that while the market share of Canada has been decreasing since 1960, the other four countries have increased their shares. In 2004, the top five United States' largest inbound markets were Canada (30% of all visitors), Mexico (26%), U.K. (9%), Japan (8%), and Germany (3%) (OTTI, 2005c). These five markets accounted for over 76 percent of all 2004 international arrivals.

Due to geographic proximity, Mexico has been the top second of the U.S. inbound travel market for the past four decades. Table 1 illustrates that about 9.7 million of Mexican travelers visited the U.S. and spent about \$5.7 billion in 2003. The total tourism-related expenditure increased 65 percent compared to that of 1997 (OTTI, 2005d). According to the Office of Travel and Tourism Industries, the United States is the most popular country destination for outbound travelers from Mexico, accounting for 87.8 percent of the total outbound travel market in 2003 (OTTI, 2005d). In 2004, approximately 1.4 million Mexicans traveled to the United States via air, which is the fourth highest market in terms of air travel (USC, 2005). As air travelers generally stay longer and spend more, they are crucial to the U.S. travel and tourism industry. Travelers from contiguous countries, such as Mexico and Canada, tend to demonstrate a direct reaction to fluctuations in currency exchange rates with the number of travelers, decreasing measurably during disadvantageous rates of exchange (WTO, 2001).

Tourism demand forecasting is an essential element of tourism planning and resource allocation. Quayson and Var (1982) point out two major reasons that accurate estimates of tourism demand are necessary: (1) public and private tourism sectors require meaningful estimates of tourism demand in order to ensure efficient allocation of scarce resources; and (2) demand elasticity provides useful information on the comparative advantages of tourism in product diversification.

Because the ups and downs of the Mexican inbound market have a significant impact on the U.S. travel and tourism industry; it is important to have an accurate forecast of demand based on analytical methods for both public and private sectors to make decisions. In this sense, it is meaningful to identify the important determinants of Mexican travel demand to the United States through econometric models. The purpose of this paper is to identify the determinants of travel demand to the United States from Mexico and to measure the effect of each determinant by using regression analysis. The specific objectives of this study are: 1) to identify the economic factors which influence the Mexican travel market to the U.S.; 2) to measure the effects of these determinants; and 3) to analyze the effects of some critical incidents, such as 9-11, the Persian Gulf War, and the Iraq War, on the number of Mexican tourist arrivals to the U.S.

### **Literature Review**

#### *International Tourism Demand Model*

A careful literature review indicates there are numerous articles using econometric methods to study the international tourism demand. These studies aimed to find the significant determinants or to forecast the tourism demand using time – series data or panel data (Kwack, 1972; Gonzalez, 1995; Qu and Lam, 1997; Akis, 1998). Among them, a



variety of forecasting techniques have been used. Var and Lee (1990) classified these methods into three approaches: quantitative, qualitative and combined. The quantitative approaches that are based on historical data are further categorized into time series and causal methods. Time series models are usually univariate in that researchers examine the past data pattern of a variable to be forecasted, and then extrapolate those patterns into the future to produce forecasts. They include trend analysis, moving average, exponential smoothing and the Box-Jenkins models. Causal methods include regression or econometric models, and gravity or trip-generation models. The qualitative approaches that involve experts or group opinions include Delphi and scenario-writing methods. The combined approaches either use the weighing scheme techniques or combine quantitative and qualitative techniques together.

A number of studies used a double-logarithmic formation for regression models (Barry and O'Hagan 1972; Fujii and Mak 1980; Gray 1966; Jud and Joseph 1974; Laber 1969; Loeb 1982; Quayson and Var 1982; Stronge and Redman 1982; Uysal and Crompton 1984; Witt and Martin 1987). There are two underlying advantages of using the double-log specification. First, the elasticities can be easily obtained from the estimation. Although the slopes of the curves change at every point, the elasticity is constant and equal to the corresponding parameter if variable transformation is applied (Klein, 1953). Second, the double-log form has relatively low residual variance compared to other functional forms with the same data sets (Jud and Joseph 1974).

Ordinary least square is a statistical method that estimates an equation that fits a line to the data by minimizing the sum of squared residuals (Greene, 1993). Based on classical lines regression model, the OLS estimators are "Best Linear Unbiased Estimator" (BLUE) if five assumptions are held, otherwise the estimated parameters are no longer best (Neter et al., 1996). These assumptions are: the model is (1) "linear in the parameters although not necessarily "linear in the variables" and the parameters are the same for all the observations; (2) each random error has a probability distribution with a zero mean; (3) the variance of the probability distribution of  $Y_t$  doesn't change with each observation; (4) the covariance between the two random errors corresponding to any two different observations is zero; and (5) non-stochastic matrix  $X$ , that is the explanatory variables' values are known prior to observing the values of the dependent variable;  $\text{Rank}(X) = KCT$ . If any of these assumptions are violated, the OLS estimations are no longer "BLUE".

Based on review of literature, the measures of tourism demand mainly include the total number of visits, arrivals or tourists, total expenditure or receipt, average length of stay, average expenditure per day, or per capita real expenditure. Among these variables, tourist arrivals and tourist expenditure were most frequently used in prior studies (Lim, 1997).

#### *Determinants of International Tourism Demand*

Previous studies propose that the major determinants of the tourism demand are the income of tourists and the price of goods and services relative to the price of substitutes (Leob, 1982; Stronge and Redman, 1982; Uysal and Crompton, 1984). Other factors, such as political unrest, economic recession and mega events, can also influence demand for tourism (Lee, Var and Blaine, 1996).

#### **Methodology**

This study was explanatory and quantitative in nature. Secondary data were utilized and they are annual time series data for the period from 1986 to 2004. The measurement of international tourism demand can be the expenditure figures of visitors, the number of tourist arrivals or the number of nights spent in the destination country, and so on. In this study, Mexican visitor arrivals to the U.S. were selected as the dependent variable in the demand model. Data on visitor arrivals from Mexico to the United States were obtained from the INS I-94 form data, published by the Office of Travel and Tourism Industries, U.S. Department of Commerce (OTTI, 2005a). The consumer price index, gross domestic product, population and exchange rate data were obtained from the International Financial Statistics Yearbook, published by the International Monetary Fund in 1999 and 2004.

#### *Theoretical and Empirical Model*

The construction of the international inbound model is based on microeconomic and international trade theories. Consumers' demand is affected by many factors such as price of goods, price of substitute goods, income, exchange rate, and qualitative factors (Perloff, 2001). In the case of international tourism, the demand for travel ( $Y$ ) abroad may depend on the income ( $I$ ), price ( $P_g$ ), travel cost ( $C$ ), and exchange rate ( $EX$ ) (Dritsakis, 2004). The general specification of the international travel demand model is as follows:

$$Y = f(I, P_g, C, EX,) \quad (1)$$

After identifying the major determinants of the demand for international tourism on a theoretical basis, this study applied the double-log form (except for the dummy variables) which is specified as:

$$\ln I_{Ai} = \beta_0 + \beta_1 \ln R_{Pi} + \beta_2 \ln R_{Ii} + \beta_3 \ln E_{Ri} + \beta_4 D_1 + \beta_5 D_2 + \beta_6 D_3 + \beta_7 D_4 + \epsilon_i \quad (2)$$

Where:

- I: 1986, 1987, ....., 2004;
- IA<sub>i</sub>: tourist arrivals from Mexico in year i to US in the same year;
- RP<sub>i</sub>: the relative price between Mexico and US in year i derived from Consumer Price Index. The relative price is defined as the ratio between CPI in destination country and CPI in origin country (Qu and Lam, 1997). The Logarithm of relative prices  $\ln RP_i (= \ln (CPI (US) / CPI (Mexico)))_i$  indicates the relative tourism price that will influence the tourist's decision: Whether to travel to U.S. or to stay at home;
- RI<sub>i</sub>: the real per capita income of Mexico in year I, defined as  $\ln RI_i = \ln ((GDP_i / Population_i) * (CPI_{US} / CPI_{MX}))$  where GDP<sub>i</sub> is the GDP of Mexico in year i (Pesos, billion, 1995 prices); Population is the annual population of Mexico in year i (million);
- ER<sub>i</sub>: Exchange rate defined as units of Pesos/US dollar;
- D<sub>1</sub>: Dummy Variable 1, representing the effect of the 9-11 terrorists attacks on Mexican tourist market in 2002 and 2003;
- D<sub>2</sub>: Dummy Variable 2, portraying the effect of the 1996 Atlanta Olympic Games 1 if 1996, 0 otherwise;
- D<sub>3</sub>: Dummy Variable 3, reflecting the effect of the 1991, 1992 and 2002 Persian Gulf War and Iraq War; 1 if 1991, 1992 and 2003, 0 otherwise;
- D<sub>4</sub>: Dummy Variable 4 representing the effect of 1987, 1990, 1991 and 2001 economic recessions; 1 if 1987, 1990, 1991 and 2001, 0 otherwise;
- β<sub>0</sub>: the coefficient of the intercept;
- β<sub>1</sub>~β<sub>8</sub>: the coefficient of corresponding independent variables; and,
- ε<sub>i</sub>: the random error term.

#### Data Analysis

Data were processed and analyzed by using SPSS for Windows program. Ordinary least square multiple regression was employed to project the Mexican tourist demand for the United States. The R square and model significant level were calculated to examine the percentage of variation in the dependent variable that can be explained by explanatory variables. An F-test was performed to evaluate the goodness of the demand model of the estimated parameters. F-test is a "lack of fit" test. It is used to ascertain whether the linear regression function is a good fit for the data or not. A T-test was conducted to separately test the significance of each parameter and to see whether the effects of these variables are as expected.

Since this study used the time-series data, it is important to check whether the data are stationary or not. If they are not stable and autocorrelation is present, the assumptions of the OLS will be violated and the estimations are no longer "BLUE". The Durbin-Watson test was applied to check the presence of the autocorrelation (Hill, Griffiths and Judge, 1997).

#### Findings

The coefficients of the demand model were found to be significant and explained more than 86% of the variation in the number of tourist arrivals from Mexico to the U.S. The Durbin-Watson statistics is 2.82 which exceed the upper limit (2.589) at a 0.05 level of significance. This suggests that the data are stable and the errors of the model are not autocorrelated. As it is pointed out, if Durbin-Watson statistics are greater than the upper limit, there is no evidence of first order serial correlation (Gujarati, 1999). Therefore the Ordinary Least Square estimations are valid and "BLUE". As F\* equals to 15.75 and its P value is much less than significant level α (0.05), it can be concluded that at least one of these eight variables has a significant effect on the Mexican inbound market to the U. S. and the regression model is not mis-specified.

All the regression coefficients have the expected signs except for the 'Persian Gulf and Iraq War'. The coefficients of 'Real Per Capita Income', 'Relative Price', 'Exchange Rate', and 'Economic Recession' are statistically significant in the model. The findings suggest that these variables are the determinants of the travel demand model for Mexican inbound market. The travel demand model for the Mexican inbound market was specified as follows:

$$\text{LnIA} = 17 - 0.819 \text{LnRP} + 0.022 \text{LnRI} - 0.865 \text{LnER} - 0.146 \text{D4} \quad (3)$$

Where:

- IA: Mexican tourist arrivals from Mexico to the U.S.;
- RP: the relative price between Mexico and the U.S.;
- RI: the real per capita income of Mexico;
- ER: Exchange rate defined as units of Pesos/US dollar; and,
- D4: Dummy Variable of economic recessions in 1987, 1990, 1991 and 2001.

The coefficient of 'Relative Price' was negative and statistically significant from zero. A one percent decrease in the relative price will lead to only about 0.82 percent increases in the inbound travel from Mexico to the U.S. As the coefficient is greater than negative one, the demand of the Mexican inbound market is considered as price inelastic. The coefficient of 'Real Per Capita Income' was positive and statistically significant from zero. This implies that a one percent increase in the real income per capita in Mexico will result in about 0.022 percent increase in arrivals to the U.S. This can be inferred that traveling to the United States is considered as "normal goods" by Mexican tourists. In economics, normal goods are goods with positive elasticities indicating that consumption of a good goes up as income increases (Hyman, 1986). Normal goods with elasticity greater than one are defined as luxuries. The negative sign of 'Exchange Rate' indicates that a one percent increase in the value of the U.S. dollar will decrease about 0.86 percent in arrivals to the U.S. This finding confirms the inverse relationship between the exchange rate and international tourism demand.

Among the dummy variables, only the coefficient of 'Economic Recession' was statistically significant. The negative sign and t – test indicate that the 'Economic Recession' has a significant effect on Mexicans travel to the U.S.

### Conclusions

Tourism is regarded as one of the most important sources of income, employment, and foreign exchange earnings (Durberry, 2000). Because of its significant roles, knowledge of determinants that influence the tourism demand is very helpful for policy – makers to make growth strategies for the tourism industry. This study aims to examine the determinants of the travel demand from Mexico to the U.S. by using econometric analysis.

The results suggested that exchange rate, relative price, and real per capita income have a significant effect on travel demand from Mexico to the U.S. All of these variables have satisfactory signs. The exchange rate appeared to be the most important determinant followed by relative price, and real per capita income in explaining demand for Mexican outbound travel to the U.S. The findings of this study were consistent with those of previous studies in which these variables were identified as important determinants of international travel demand (Gray, 1978; Jud and Joseph, 1974; Leob, 1982; Stronge and Redman, 1982). The negative sign of the coefficient of exchange rate indicated an increase in exchange rate between the Pesos and the U.S. dollar will lead to a decrease in the tourism demand.

It was found that the Mexican tourists to the U.S. were insensitive to price change. In the case of price inelasticity, the expenditures that Mexican tourists spent in the U.S. may actually decrease. This is because while the demand may rise when relative price decreases, the reduction in price results in a proportionally smaller increase in quantity demanded (David, 1990). Therefore price discount would not be an appropriate way to attract Mexican tourists to the U.S.

The income determinant was found positive and statistically significant. The findings also indicated that traveling to the United States was regarded as normal goods by Mexican tourists. The implication is that when income level increases, there would be more Mexican tourists travel to the United States. The findings are consistent with the results in previous studies on international tourism (Gray, 1978; Jud and Joseph, 1974; Leob, 1982; Stronge and Redman, 1982).

Special events also had impact on the Mexican inbound market. The results indicated that the '9-11' terrorists attacks and the economic recession had a negative effect on the Mexican inbound market as they had a negative sign, but only economic recession was found statistically significant. This finding suggests that international tourism is very vulnerable to social and economic factors. Tourists are sensitive to the safety of the destination and terrorism usually has a devastating impact on the tourism industry.

It was not surprising that the Olympic Games failed to attract Mexican tourists to visit the U.S. In previous research, the Olympic Games were found to have insignificant impact on the inbound tourists market (Lee, Var and Blaine, 1996; Or, 2002). This suggests that public and private sectors should be cautious about allocating economic resources to attract inbound tourists in the event of Olympic Games. It was unexpected that the variable of 'Persian Gulf and Iraq War'

had a positive sign although it was statistically insignificant. It can be inferred that the 'War' didn't have a significant effect on the Mexican inbound market mainly because it was far away from the destination.

#### *Limitations*

This study had two limitations. Due to data unavailability, the explanatory variable of transportation cost was not included in the model and this study only included social-economic factors to develop the demand model. The motivational and behavioral factors of Mexican tourists were not reflected in the model.

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**Abstract**

Research and development in food service technology offers differentiation and cost leadership in strategic terms. At present, the innovations in equipment design and layout are of a defensive or reactive nature. Examples of defensive innovation include faster and better preparation methods, improved temperature recording, even cooking, energy and labour savings, less waste, better sanitation and flexibility. In contrast, developments in offensive or pro-active innovation, which can radically change current practices are rare. Novel food service processes can evolve as a result of adoption of technological breakthroughs in 'high-tech' fields of the economy.

Key Words: innovation, food services, technology, equipment, product development

**Introduction**

Food services are an essential component of the tourism/ hospitality industry. This sector generates the turnover of about \$US360 billion per year in the US alone (Simpson and Carevic, 2004), the global figure for the food service market is \$US1.3 trillion (Webber, 2004). The current growth in leisure and tourism is accompanied by an increase in complexity of food production, the only manufacturing function in the hospitality sector (Jones and Lockwood, 2002). A typical cruise liner, such as Disney Magic (Disney Cruise Line), has the staff of over 100 chefs preparing about 10,000 meals per day (Anon, 2004b). The drive for efficiency and effectiveness results in the centralisation of food production in large institutions such as health/ aged care (New South Wales Health Department, 1996; New South Wales Health Department 2005) and corrective services. The Omeida, a CPU (central production unit) of the New York State Office of General Services, for example, supplies 70 prisons (66,000 inmates) with 198,000 meals per day (New York State Department of Corrective Services, 2003). Alfa Flight Services, an in-flight caterer based in the UK, Europe, North America, Australia and India, produces 60 million meals per year.

The dual nature of food service operations incorporating manufacturing and service, commands a variety of disciplines informing research and innovation in this field. Ethnology, sociology, anthropology, business economics, nutrition, domestic science and public health constitute what is called 'meal science' (Gustafson, 2004). This new discipline focuses on service aspects and aims mainly at answering the question 'What?' What are the styles of service (room architecture and interior design, dining atmosphere and food attributes) preferred by customers? This paper, on the other hand, describes developments in food production supported by science-based disciplines answering the question 'How?': how to make a product with the attributes identified by researches in 'meal science'; how to adopt technological developments in 'high tech' branches of economy to food services. The paper reviews the latest innovations in equipment, facility, food and packaging. It addresses the dearth of theoretical analysis of developments in this field and outlines possible pathways in technology-based creativity. Two stances in innovation, offensive based on revolutionary breakthroughs and defensive based on gradual evolutionary improvements, are identified. The paper concludes that 'offensive' inventions can lift the industry's performance.

**Pathways in innovation**

Creativity, the basis for innovation, can be defined by numerous attributes: originality and uniqueness, lateral thinking in answering a long-standing question; richness of ideas creating more ideas; mental stimulation, spiritual uplift, cleverness; applicability and usefulness; improved understanding, efficiency and aesthetic value (Saaty, 1998). The efficiency of operations is sought by businesses. Traditionally, creativity in a food service context is dominated by artistic creativity of chefs and not emerging technologies associated with scientific breakthroughs. Such innovations often originate at the interface of different disciplines (food science, engineering, operational management, etc.) or different branches of the economy (Table 1). HACCP (hazard analysis critical control point) principles, a common risk management practice, were developed to ensure food safety in space by NASA (US) in the 1960s. Similarly, high efficiency arrestor filters, currently used for ventless hoods, were originally designed by the Atomic Energy Commission (US) to filter radioactive particles out of the air (Sherer, 2004). Currently, food services of the New South Wales Health Department (Australia) started the process of eliminating dishwashing in hospitals by introducing the type of recyclable/ biodegradable dishware originally developed by Visy Food Service for the Sydney Olympics 2000 ([www.visy.com.au](http://www.visy.com.au)).

The incorporation of probiotic bacteria into yoghurts stimulated the idea of using the so-called 'protective' cultures, lactic acid bacteria commonly associated with yoghurt and cheese, in packaged cook-chill meals to prevent botulism (Rodgers, 2002). The new discipline of predictive microbiology offering a number of potential applications in HACCP

management (Miles and Ross, 1999) can be viewed as a hybrid between food microbiology and statistics/computer modelling. The potential sources of new ideas include advertising agencies, consultants, universities and other academic institutions, competitors, suppliers, employees, distributors and agents (Evans et al., 2003). Individual contributions are also important. Pathways in innovation are often shaped by the numerous entrepreneurs, not only chefs, but also other professionals servicing the industry, engineers, chemists, food technologists and others. For example, Hans Jørgen Houmøller, a turbine engineer, founded HOUNØ an oven manufacturing company in Denmark in 1977; the company differentiates itself by the design of the alternating air-flow systems, which provide superior temperature distribution in the oven cooking chamber.

Table 1  
Examples of Technology Transfer from Different Fields to Food Service Applications

Innovation	Idea originated from	Relevance to food services
HACCP	NASA space programs	Food safety assurance
Self-sterilising materials	Medicine	
Incorporation of antimicrobials into equipment	Incorporation of antimicrobials into packaging	Prevention of cross-contamination
Predictive modelling	Statistics and computation	HACCP and risk management
Protective cultures for extended shelf-life meals	Adding probiotic bacteria to yoghurt	Prevention of botulism
2zones <sup>2</sup> kitchen design	Architecture	Product flow and hygiene
Reversible valves for efficient air flow in ovens	Turbine engineering	Even temperature distribution
The design of tumble-chillers	Clothes washing machine design	Better heat transfer for 'cooked-in-a-bag' products
Immersion circulator	Laboratory equipment in medicine	Gentle heating of sauces
Filters for hoodless vents	Nuclear energy projects	More flexibility in equipment layout

### Equipment design and layout

The main objectives of designers of food service equipment are better temperature distribution and control, faster cooking, less energy and labour costs, safer operations, better sanitation and flexibility. For example, in a modern oven salmon fillets can be prepared in 3 minutes, a baked quarter chicken in 1,5 minutes and a pizza in 60 seconds (Bendall, 2004). Steam-powered cooking provides rapid heating and even temperature distribution due to higher thermal conductivity of steam. Steamers equipped with a vacuum pump allow quick heating and gentle cooking of heat sensitive foods at temperatures below water's boiling point. This also contributes to the versatility of steamers - in addition to cooking function they can be used for gentle re-heating and holding of meals. In pressure fryers (pressure is created by escaping vapour), food can be cooked at higher temperatures faster and moisture loss is reduced. Induction heating offers high energy-efficiency (95%) as well as the high speed of cooking (Anon., 2002c). In induction units, such as iChef (Induced Energy, UK), altering current in the coils creates a magnetic field that excites the metal molecules in the cookware with in a special electromagnetic coating capable of absorbing the magnetic waves.

The shape of the heating chamber is an important design consideration. The application of sophisticated modelling techniques capable of predicting the heat flow, such as Computational Fluid Dynamics (Verboven et al., 1999) and neural networks (Xie, 2002), may result in units of unusual shapes in the future - a spherical cooking chamber, for example. Currently, the Steam Vector Baffling Systems developed by ACCUTemp Products (US) accelerates and directs the steam flow without fans or other moving parts using the wall geometry (ACCUTemp Products Inc., 2005). Similarly, in convection cooking, the dual-flow-path valve alternately directs the heated and returning cooler air through the multi-ported walls of the oven cavity (Bendall, 2004).

Incorporation of food safety features in design is driven by legislation, chapter four 'Equipment, Utensils and Linen' of the US Food and Drug Administration Food Code, for example. Units combining conveniently situated refrigeration and heating (Imperial Commercial Cooking Equipment, 2003) reduce the amount of movement at a work station. Numerous temperature recording devices and the incorporation of anti-bacterials in food contact surfaces support HACCP and sanitation (Good Manufacturing Practices).

Food safety features are the universal requirements for any food service operation, while other design solutions are more specific to a particular food service sector. The drive for energy and space saving on cruise-ships dictated the need for desk and wall mounted units, the use of induction cookers and blast-chillers (Anon, 2004b). Casinos, convention centres, stadiums, airlines, major hospitals and other large institutions, on the other hand, would require high volume industrial type equipment - continuous cookers/ chillers/freezers, automated portioning/packaging machines, conveyer belts and even folk lifts for transportation. Such configuration of equipment can be classified as a food service system. The systems traditionally used to support the complex logistics of production in large quantities are cook-hot holding, cook-chill (traditional and extended shelf-life or sous vide) and cook-freeze (Creed, 2001).

The use of different energy sources and other innovative energy management strategies reflect environmental concerns which are addressed in the UN Framework on Climate Change (UNFCCC) and Commission for Sustainable Development (UNCSD). Other examples include the European Union's Directive on Integrated Pollution Prevention and Control (IPPC) and the Dow Jones Sustainability Indexes ([www.sustainability-indexes.com](http://www.sustainability-indexes.com)). New design of filters reduces air pollution: grease particles can be converted to harmless carbon dust, carbon dioxide and water vapour using packed bead beds, cyclonic motion filters (water mist hoods) and the latest UV light technology. Ventless hoods, which do not require ductwork, offer more flexibility in equipment layout. Their design is based on the high efficiency arrestor filters, which can capture particles larger than 0.3 microns in size (Sherer, 2004).

Equipment layout solutions integrate elements of food science, engineering and operations management. In the novel 2zones<sup>2</sup> kitchen design (virtual tour is available on <http://www.2zones2.com/en>), for example, the four functional zones (cold/clean, cold/ soiled, warm/clean, warm/soiled) create a series of parallel climate-controlled zone, streamline product flow in operational and food safety terms. The 2zones<sup>2</sup> kitchen is a modular stainless steel building where preparation takes place in 'cooking canals' and food is stored in temperature controlled cabinets resulting in energy saving (low volume of air to be chilled in comparison with a collroom) and the 50% reduction in floor space (Anon, 2004c).

Each of the cases discussed above demonstrates innovation in design of physical resources in response to particular problems. In all cases, innovation improves speed, efficiency and hygiene in food preparation, and affords substantial cost benefits. Such innovation therefore has significant competitive advantages for organizations prepared to make the necessary investment.

### **Innovations in Service**

Advances in design of reheating and holding equipment address the ease of temperature control, aesthetics and personalisation of service. There are numerous types of units for holding, displaying, re-heating, portioning and cooking food in front of consumers. Equipment for display cooking, such as clamshell and griddles (Anon., 2004a), single-serve pasta cookers and high speed broilers (Lawn, 2004) provide speed of service in fast-food and personalised service in high class establishments. The combination of induction cooking and a vacuum-powered air cleaner can be used for 'sizzling on-the-spot' preparation in front of the customer. It offers quick and efficient preparation with minimum escaping odours and heat.

The solid-to-solid phase heat exchange used in EnduraHeat<sup>TM</sup> banquet carts manufactured by Carter-Hoffmann (US) provides even temperature distribution and long-lasting heat retention (up to two hours). The variable energy sources (electricity plus fuel cans) of the carts provide the additional flexibility needed for applications in a variety of settings. Induction heating can be used in meal rethermalisation carts; the crockery for the hot items has the special electromagnetic coating.

The combination of novel food service equipment and production management software reduces the gap in service quality between commercial and institutional sectors. In healthcare, patients can choose food from dishes kept hot and displayed in bulk in a 'hostess trolley' (a heated delivery cart) in a cafeteria-type setting. This menu-less operation reduces the potential error in meal assembly and misunderstanding of menu selections. Apart from waste reduction, it also provides a possibility for social interaction during mealtime, improves the perception of freshness and the level of satisfaction in general (Hartwell and Edwards, 2003). Even room service with a restaurant-style menu is possible in institutional settings. For example, through the combination of holding units and electronic ordering systems Koshers, Kids and Cold Cuisine served on request to the 46 different locations across the seven-building campus of the Robert Wood Johnson University Hospital (Hamilton, US),

Novel approaches to dining area layouts represent another aspect of innovation in service. Despite the growth in the size of food service operations in general, service areas are becoming more intimate and interchangeable. The

chameleon-like dining facility on the Queen Mary 2 (Cunard Cruise Line), for example, has a self-service café setting during breakfast, which becomes a café-bar during lunch and a waiter-served bistro in the evening. Unique themes and food concepts coupled with the 'à la minute' cooking equipment (Anon., 2004b) offer a variety of personalised choices in food and service styles. It is conceivable that a futuristic 'high tech' service method include the use of human-like robots capable of communication by speaking and gesturing (NASA, 2005). This can create an attraction in itself and become a tourist destination in itself.

### Two stances in food service innovation

Currently, innovations in marketing concepts dominate the food service sector. High involvement of marketing departments in research and development is usually associated with less technologically sophisticated organisations (Souder, 1987). At present, food service operators do not challenge each other with revolutionary developments in food service technology. As a result, there is no competitive pressure to enlist equipment/packaging suppliers to find radical solutions or build the science-based competencies underpinning food services (Rodgers, 2005), the base for 'high tech' innovation. At present, suppliers are pursuing incremental improvements as a reaction to customer complaints, legislative requirements or operational problems. This represents a defensive stance in innovation.

Radically new ideas such as the 2zones<sup>2</sup> kitchen design represent offensive innovation. Creative evaluation of developments in 'cutting edge' manufacturing industries can result in their adaptation to food services. Gas detectors can be 'trained' to recognise the 'cooked' aroma (Madsen and Grypa, 2000) and switch a unit from cooking to holding mode when a product is ready in culinary terms. Fire-resistant materials developed for applications in space may replace expensive stainless steel in production and service equipment. On the service side, sophisticated dishes and creative technology-driven serving methods could have complemented futuristic developments in tourism such as Burj Al Arab or the underwater luxury resort hotel, Hydropolis ('Sunken City'), in Dubai (Saudi Arabia). At present, the 'high tech' design of these outstanding properties is accompanied by the seafood specialities and sail-shaped dishes reflecting the water theme.

### Conclusion

Research and development in equipment, food, packaging and service techniques improve energy and labour efficiency, food quality and safety. Often, novel solutions result from the interrelation between different fields of technological developments. The scope of innovation varies from a single piece of equipment to a package supporting the whole food production/service system. The replacement of 'low tech' approaches with 'high tech' revolutionary developments informed by science and technology have the potential to shift food service innovation onto the offensive. This would increase the sophistication and profitability of individual organisations and the industry as a whole, and raise the status of the food service professional. Technical competency of operators is an essential 'ingredient' of this shift.

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## Linking Data Characteristics to Statistical Methods: Case of Consumer Willingness to Pay for Safer Foods and Their Concerns for Food Safety

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### Abstract

Selecting appropriate statistical methods is probably the most critical decision for researchers. Using an example - to assess how consumers' concern for food safety impacts their attitude towards a price premium of safer foods - this paper argues that data characteristics must drive methodological choices. Data from a willingness to pay example were analyzed using a linear regression model and non-parametric methods. Both results are interpreted to show that non-parametric methods not only provide an accurate approach to analyze ordinal and nominal data but also a richer analysis. Implications to potentially impact rigor and accuracy of future research are discussed.

Key Words – statistical methods, non-parametric, data characteristics, ordinal data analysis

### Introduction

Fisher (1922) aptly stated that the objective of statistical methods is the “reduction of data” to a manageable scale so that we can evaluate underlying information more effectively. This is a critical observation as it brings to prominence the role of data in any kind of statistical analysis. In other words, if a set of data must be reduced to a more *manageable* amount then how we reduce that data (statistical methods) depends upon the type of data. The logical progression towards statistical analysis must first pass through theoretical arguments/research questions, to data requirements, and then selection of appropriate methods (Spanos, 1998). This paper argues that link between data type and selection of statistical methods must be made clearer and more accurate. Using survey data the paper shows that improved linkage between data type and statistical methods while increasing the accuracy of analysis will not reduce the richness of results and discussions. As an example, the paper assesses how consumers' concern for food safety impacts their attitude towards paying a higher price for safer and certified foods in restaurants. The data are analyzed through two types of methods: a naïve linear regression model and a set of non-parametric statistics, loglinear analysis, and logistics regression. Results of both types of methodologies are discussed and compared.

### Literature review

#### *Measurement scales*

Measurement scales have been traditionally classified into four categories (Spanos, 1998). The first category and the one with the richest mathematical properties is the ratio scale. The structure of these scales is such that any two values along this scale,  $x_1$  and  $x_2$ , can have the following properties: a) The ratio of  $x_1/x_2$  is a meaningful quantity; b) The distance between  $(x_1 - x_2)$  is also a meaningful quantity; and c) And finally the two values have a natural ordering where such a comparison, for example  $x_2 \geq x_1$  would make sense. A simple example of a ratio scale is age where all the above mentioned properties will be satisfied. Properties a-b also implies that the scales are continuous or that the values on this scale represent a continuum. Spanos (1986) shows that a function will be defined as continuous if its distribution  $F(x)$  is

continuous for all  $x \in \mathfrak{R}$  and that there is a non-negative function  $f(\cdot)$  on the real line such that: 
$$F(x) = \int_{-\infty}^x f(u) du,$$

$\forall x \in \mathfrak{R}$ . As it turns out, ratio scales are continuous and therefore can be plotted on the real number line  $\mathfrak{R}$ .

The second category of measurement scales is called interval scales. If a variable is measured on an interval scale, only b-c of the above properties will result in meaningful quantities. Unlike the ratio scale, any two values on an interval scale cannot be divided to provide a meaningful result. An example is that of temperature scales. Interval scales are also continuous measures.

The third category of scales is called ordinal scales. Variables measured on such a scale only have property c mentioned above, that is, a natural ordering. Most attitudinal and behavior measuring scales are of this category where there may be a natural ordering of the scale but properties a-b are not satisfied. For instance, in the case of the food safety

example, any scale measuring responses of an individual's willingness to pay for safer foods will be classified as an ordinal scale.

The last category of measurement scales is the nominal type. In such scales there is not even a natural ordering. All that one can say about two values on such a scale is that one is different than the other. Some common examples of nominal scales are marital status and gender.

The last two categories of scales, ordinal and nominal, are commonly called categorical scales. As Spanos (1998) noted there is a wide variation of terms that are used in the statistics literature. This can be confusing especially when methodologies are being selected based on scale labels. Both ordinal and nominal scales are non-continuous, and commonly called *discrete*. This is because an attitudinal scale cannot satisfy the property of a continuous function

$$F(x) = \int_{-\infty}^x f(u)du, \forall x \in \mathfrak{R}, \text{ and cannot be plotted on the real number line } \mathfrak{R}.$$

While the issue of measurement scale is no doubt an interesting one, it is critical to understand why they are important in the choice of an appropriate methodology. For example, mean, variance, and covariance are the conceptual building blocks of regression analysis that is a popular methodology amongst researchers. Unless these concepts can be computed on certain scales, it would be meaningless to apply regression models on that particular data type. In order to clarify this issue further, it would be valuable to take the example of the most popular type of scale used by social scientists, i.e. the attitudinal and behavioral scales in context of regression models. First it would be important to understand the make up of such scales and then to see how they may or may not be used in regression models. Based on the review of measurement scales, typically attitudinal scales will be classified as ordinal scales. While such scales may appear to be very much like interval scales, their underlying properties are clearly less rich than an interval scale.

#### *Linear regression – underlying assumptions*

Spanos (1998) presents a simple explanation of a regression function: "The regression function is defined to be the conditional mean of Y given X=x *interpreted as a function of x*." The mathematical formulation of this conditional mean function is as follows:

$E(Y|X=x)=h(x), x \in \mathfrak{R}_x$ . Similarly the skedastic function is defined as the conditional variance and in the same manner *interpreted as a function of x*:  $\text{Var}(Y|X=x)=hg(x), x \in \mathfrak{R}_x$ .

For the involved two suggested readings are Spanos (1986, 1998). However for the current discussion it would be valuable to elaborate just a little more – by also looking at two most commonly referred statistics of a linear regression model, the  $R^2$  and the  $\beta$  estimates.  $R^2$ , commonly known as the Pearson product moment correlation coefficient, has the

following mathematical derivation:  $r = \frac{\sum(X - \mu_x)(Y - \mu_y)}{n\sigma_x\sigma_y}$  where  $\mu$  represent respective means of series X and Y, and

$\sigma$  represent the series' variances.

Another way to assess the suitability of ordinal data is to review the underlying assumptions of linear regression and verify if such data meets all these assumptions. Aldrich and Nelson (1984) provide a brief review of the three main Gauss-Markov assumptions underlying the linear regression model. These are the distribution, homogeneity, and dependence assumptions. For simplicity here we will only discuss the distribution assumption. This assumption states that all x (in the earlier stated functional form of the regression model) are normally distributed. The probability model for a normal linear regression model can be specified as follows (Spanos, 1998: page 373):

$$\Phi = \{f(y_i | x_i; \theta) = \frac{1}{\sigma\sqrt{2\pi}} \exp\left\{-\frac{(y_i - \beta_0 - \beta_1 x_i)^2}{2\sigma^2}\right\}, \theta \in \Theta, y_i \in \mathfrak{R}\}$$

where  $\theta = (\beta_0, \beta_1, \sigma^2), \Theta := \mathfrak{R}^2 \times \mathfrak{R}$ .

The literature on analyzing ordinal and nominal data (from here on categorical) continues to improve in sophistication. The simplest and most widely used statistics for measuring dependence between two or more categorical variables are based on cross-tabulation of data. Until about 1960s chi-square statistics were the most commonly used methods to evaluate the dependence structure of two or more variables presented in a cross-tabulated format (Jeansonne, 2005). Then in the late 1970s cross tabulation data began to be analyzed using loglinear models. Early work of L.A. Goodman and then of researchers such as Bishop, Finberg & Holland (1975), Haberman (1974), and Agresti (1990) contributed significantly.

## Methodology

### *Sample and Data Collection*

Subjects for this study were 309 consumers contacted by Zoomerang zSample (Zoomerang.com). The Zoomerang zSample, recruited through direct U.S. mail, is selected to be representative of gender and age. The zSample has been used for market research by many industries including quick service and casual dining restaurants, grocery stores, clothing stores, and department stores. The sample was nearly equally divided between males and females and had good age distribution between 18 and 65. The study sample tended to be educated (47% with a college degree) and overrepresented by whites (88%). The on-line questionnaire included two questions to determine weekly frequency of eating away from home and how much was spent on those occasions. Questions examined attitudes toward food safety when eating away from home, food safety problems observed in restaurants, willingness to pay extra for food safety assurance, and demographic characteristics of the study sample. Responses were measured on a 7-point scale. The scale values were labeled as “1=Strongly Disagree” to “7=Strongly Agree” with a central value at “4=No Opinion.”

### *Data analysis*

Responses for two attitudinal statements were analyzed to answer the research questions. These statements were as follows: “I am concerned about food safety” and “I would not pay more to buy ‘certified safe food’ in restaurants.” Responses to both statements were measured on a 7-point ordinal scale where “1=Strongly Disagree” and “7=Strongly Agree.” To begin, descriptive statistics and chi-square test of independence was conducted on both these statements, or from here on variables. Then the data for these two variables were analyzed using two types of methods. The first one is a regression model where the responses to the statement assessing consumers’ willingness to pay more for certified food was treated as the dependent variable and their concern about food safety as the independent variable. This is referred to as the naïve single variable regression model. The second sets of statistics were chosen from the inventory of non-parametric analysis. These included the *gamma*, *tau-b*, *tauc*, and *Somer’s d* coefficients, a loglinear analysis, and a logistic regression analysis.

## Results

Descriptive statistics of a set of five variables from the response set (simply for clarity of this discussion), including the two under discussion in the current example, involved assessing median and mode.

### *Naïve regression model*

Assuming that use of a regression model was indeed validated, the model is significant at  $p < 0.10$ . The  $R^2$  has a positive sign but the independent variable’s coefficient has a negative sign ( $-0.119$ ;  $p < 0.10$ ). These values suggest that as concern for food safety increases consumers are less likely to disagree to *not* pay a price premium for safer and certified foods, although their concern towards food safety only explains 1% of their disagreement towards not paying a price premium. Note, results are only significant at  $p < 0.10$ . Obviously this is a simplistic analysis and in no way intended to be a comprehensive explanation of consumer attitudes.

### *Non parametric analyses*

The same data for two variables were assessed using a set of non-parametric statistical methods. First the dependence structure of the two variable model is assessed. Chi-square test resulted in a significant value of 66.34 (*degrees of freedom* ( $df$ )=36;  $p < 0.00$ ). It appears that there is at least a weak dependence between the two variables. Other statistics suggest the direction and magnitude of this effect. The Somer’s  $d$ , ( $-0.10$ ;  $p < 0.10$ ), Kendall’s Tau-b ( $-0.09$ ;  $p < 0.10$ ), and Tau-c ( $-0.09$ ;  $p < 0.10$ ), and the gamma coefficient ( $-0.11$ ;  $p < 0.10$ ) all have negative signs, although Somers’  $d$  is the key directional statistic. Again, results are only significant at  $p < 0.10$ . The strength of the relationship between the two variables is best interpreted through the Kendall’s Tau-b and Tau-c values. The interpretation of these two statistics is slightly different from that of the  $R^2$ . Tau-b and c of 0.09 can be interpreted to say that there is a 9% probability that the association order of the two variables is in the negative direction. The gamma coefficient interpretation is also similar to that of the Kendall’s taus except that it is calculated in a slightly different manner, which accounts for the difference in their values. Overall these values suggest that while the relationship between these two variables exists, it is at best a weak one. While these basic non-parametric statistics provide the direction and strength of association, they provide no further details of how the responses are associated amongst the two variables. For this the data can be analyzed using loglinear models and logistic regression analysis.

Summing up the analysis of non-parametric statistics, loglinear, and logistic regression it could be said that while the association statistics show a weak negative relationship between concern for food safety and consumers’ *not willing* to pay more for safer foods, a more detailed analysis shows that at best consumers have no opinions about *not wanting* to pay

more for safer foods. At best the negative relationship between these two variables appears to be on the higher spectrum of the ordinal scale. This essentially implies that it is *difficult* to conclude that consumers would be willing or not willing to pay more for safer foods just on the basis of their concern for food safety. The regression result, if we use the predicted value, may be interpreted to say that consumers would probably *agree* not to pay more. What is best about these methods is that underlying assumptions require that responses be measured on an ordinal scale, very similar to the one used to get responses for this example. Therefore assumptions of these models are very easily verifiable.

### Conclusions

The purpose of this paper was to show that data characteristics must strongly be associated with the choice of an appropriate statistical method. This argument is presented by first clarifying what is meant by data characteristics. Then a popular type of measurement scale, a 7-point attitudinal scale, is shown to have strong properties of ordinal data. The paper then shows how ordinal data may not be suitable for use in certain statistical methods, such as the popularly used methodology of regression analysis. This, however, does not mean that ordinal data cannot be analyzed rigorously. Therefore an inventory of non-parametric statistics, loglinear analysis, and logistic analysis methods are discussed briefly. Then a real data example is analyzed using all these methods, including the less appropriate naïve regression model. Results of analyses show that even though the regression analysis estimates are very similar to those obtained using non-parametric statistics, it is difficult to verify the underlying assumptions of such models. As it turns out, even in a single variable model there can be minor inaccuracies. These inaccuracies can easily multiply in more complex models. On the other hand, non-parametric statistics, loglinear analysis, and logistic regression assumptions do not present any restrictions as those in the linear regression model and therefore are easily verifiable. Comparison of results from these models provides a very similar conclusion except that loglinear and logistic analysis present further details as to the nuances on the ordinal scale. Even if such information were interpretable from the regression results, its accuracy is suspect. Finally, one of the most critical results of the regression model, estimated values, is not clearly interpretable.

### Implication and contributions

An obvious question is “why do we care?” As researchers we strive for accuracy in our work. This paper argues that error in linking data accurately to statistical methods can result in inaccuracies in research findings. Does it imply that as researchers we purposely would choose an inaccurate statistical method? Probably not! But is it possible that oversight can lead to misjudgment? Absolutely! One may feel it is preposterous to question the practice that is being adopted by a *majority* of researchers. As keen investigators we only have to sincerely answer that question for ourselves – just because we are all are doing it does not make it right! This paper, through an example, suggests that certain types of data, i.e. ordinal and nominal, are not suited for analysis in certain popular statistical methods, like regression type models, but rather in non-parametric statistical methods. Non-parametric methods like the ones suggested here have still not become very popular with social scientists such as hospitality and tourism researchers. The mechanics of these models, especially interpretation of their results, are not straight forward. These could be some of the reasons why social scientists continue to shy away from such methods. But we do so by losing accuracy of research investigations. As researchers we are not just interested in our *current* investigations but the cumulative effect one may have over the entirety. So, our responsibility for accurate and valid research is not just for single and current projects but how we contribute to the body of literature in our field. The purpose of this paper was to open up the inquiry into the accuracy of links between data characteristics and statistical methods used. The reason is an obvious one: to ensure that future research continues to increase its accuracy so that as a community we can better understand the underlying phenomenon.

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## Modeling the Implementation of Sustainable Supply Chain Management Practices by Tour Operators

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### Abstract

Increasing awareness and demands in sustainable tourism require companies to implement sustainable Supply Chain Management policies (SCM). Tour operators can significantly influence sustainable tourism due to their central distribution role and capability to direct tourists to destinations and suppliers. Despite the increasing importance of SCM and sustainability, the applicability of sustainable SCM practices in tourism is not studied yet. This paper proposes a framework of sustainable SCM that tour operators can develop for integrating sustainability in tourism value systems. The model is based on SC collaboration concepts, its applicability to tour operators and its implications for future studies are analyzed.

**Key Words:** supply chain management, sustainability, tour operators.

### Introduction

Intense global competition forces companies to cluster and cooperate in supply chains for becoming more agile and flexible, while reducing their costs and enhancing their revenues. On the other hand, increasing tourists' concerns' on environmental and sustainable issues are also forcing companies to adopt supply chain management (SCM) strategies. Sustainability includes the achievement of community wide good socio-economic, cultural and environmental long-term impacts, while SCM covers all aspects of a product's-service's life such as raw materials, processing, manufacture, distribution, retailing, customer use and final product disposal. Indeed, being part of a value system, firms realize that achieving long-term sustainability is not a firm but rather a supply chain issue involving all downstream and upstream players. A good example of sustainable management through a SCM perspective is the DIY retailer, B&Q. B&Q has developed and implemented a major SCM programme, first addressing environmental impacts, and now incorporating social impacts as well, for all its 40,000 products. In order to assess its overall sustainability as a retailer, B&Q analyses the sustainability of its products going right back to the raw materials from which they were produced, through suppliers, suppliers' suppliers, and so on, right back to source, as well as ensuring that B&Q meets sustainability criteria in its own internal operations. For B&Q, the ethics of a product - including employment and working conditions - are an important part of quality and sustainability.

The case of the tourism sector is not an exception to such trends. Tourism firms increasingly realise that (Morrison, Lynch and Johns, 2004): a) the collaboration with competitors, suppliers, customers, and/or firms in other industries is an imperative opportunity for building strengths and facing the global competition; and b) the multidimensionality and variety of the tourism product/package (e.g. transportation, accommodation, visitors' attractions etc) necessitates interfirm collaboration and networking. The role of collaborative tourism networks on the development of sustainable destination management strategies is also highlighted. Indeed, tourism is one of the largest and fastest growing global industries, creating significant employment and economic development, particularly in many (developing) countries. However, tourism growth is also responsible for several negative environmental and social impacts, from resource consumption, pollution and the generation of wastes. Tourism activities can also disrupt or destroy local cultures and introduce unwanted activities such as drugs and prostitution. In this vein, the development of sustainable tourism strategies has become an important and crucial aspect in any tourism development master plan. The implementation of such sustainable practices is heavily influenced by tour operators, because of their ability to influence the volume and direction of tourism flows as well as to integrate and bring together a wide number of tourism suppliers. Indeed, statistics reflect this power of tour operators; tour operators represent 12 percent of international arrivals, while in Europe they represent 35 percent of leisure air holidays (International Federation of Tour Operators).

However, despite the importance and role of tour operators in sustainable tourism management, there has been none effort so far to investigate how tour operators can apply concepts and practices of SCM for integrating and implementing in their supply chains socio-economic, cultural and environmental sustainable policies. This study aims to address this gap by proposing and analysing a SCM framework that tour operators can use for creating a sustainable supply chain. So, first, the aims of SCM are reviewed and the tour operators' role in managing sustainable tourism supply chains is explained. The literature is reviewed for identifying critical success factors for SCM collaboration and for synthesizing the latter into a SCM framework. The third part applies and investigates the implications of this framework in the case of tour operators. Finally, implications and directions for future research are discussed.

**Sustainable SCM in the tourism chain: a tour operators' approach**

SCM often refers either to a process-oriented management approach to sourcing, producing and delivering goods/services to end consumers or in a broader meaning to the co-ordination of the various actors of the same SC (Harald, 1996). In this vein, SCM collaboration implies that the chain members become involved in coordinating activities that span boundaries of their organisations in order to fulfil end customer needs and develop as agile SC (Bowersox, 1990). SCM offers the opportunity to capture the synergy of intra- and inter-firm integration and management, while it entails firms to co-operate with the common goal to increase the overall chain performance and end consumer satisfaction, rather than competing for a bigger share of the fixed profit. Overall, SCM deals with total business-process excellence and represents a new way of managing the business and relationships with other SC firms.

The applicability of SCM practices and collaboration in the tourism supply chains has been argued by Morrison et al. (2003), but due to scarcity of research in this field, the urgency of future studies investigating the implications of SCM in the tourism sector has been advocated. The SC comprises the suppliers of all the goods and services that go into the delivery of tourism products to consumers, such as accommodation, transport and excursions, but also bars and restaurants, handicrafts, food production, waste disposal, and the infrastructure that supports tourism in destinations. A further aspect of the tourism SC is also the activities of customers while on holiday, particularly in relation to their behaviour, and what they source for themselves in destinations. Tour operators are marketing the whole holiday experience to customers, and this includes opportunities to experience a destination's local products and services. Tour operators and their local guides and representatives also play a crucial role in educating and making travellers aware about the environmental and socio-cultural sensitivities of the destination and advising them on how to behave better, e.g. tour operators' travellers' training in reducing child sexual abuse in Asian countries, in protecting the rain forest while in the Amazon's area etc. Tour operators can also play a significant role in providing appropriate advice to their customers about local products and services, and in ensuring that all local producers and service providers have access to tourists on a fair basis (which in turn enhances economic sustainability by fairly diffusing economic benefits in tourism destinations). Overall, all previous components consist the holiday package, that is bought either direct from the tourism suppliers or indirectly through the tour operators. Hence, sustainability in the tourism sector is a multi-sectoral and multi-disciplinary concept, as sustainability of tourism SC includes long-term socio-economic, cultural and environmental benefits for all tourism suppliers as well as for the whole infrastructure and super-structure of the tourism destination. In this vein, the sustainability of the holiday package depends of the performance of all the products and links of the tourism SC and so, tour operators need to promote the sustainability of the totality of components of their tourism packages. Moreover, because tour operators can substantially influence the volume and direction of tourism flows as well as the use of any particular tourism products, tour operators can use their influence on the tourism SC for promoting the implementation and development of sustainable tourism SCM practices. In realising that SC collaboration is a key factor for achieving tourism sustainability, tour operators have recently developed an initiative for promoting sustainable SCM practices in tourism, i.e. [www.toinitiative.org](http://www.toinitiative.org).

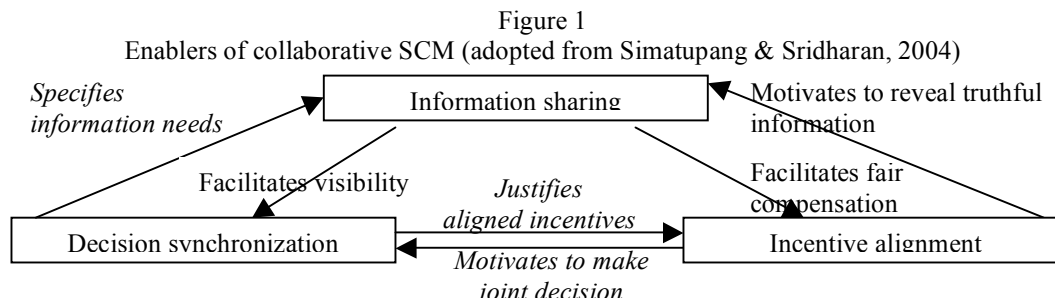
Tour operators need to incorporate sustainable management in all their SCM practices. The major areas in which tour operators can apply sustainable SCM, influence the behaviour and collaborate with other SC downstream (suppliers, destinations) and upstream (travellers) players are (TOI, 2004): *Internal management*, e.g. sustainability principles in HRM, office supplies and production of printed materials; *Product development and management*, by planning tours and selecting holiday package components that minimise environmental, economic and social impacts; *SCM and contracting with suppliers*, use of sustainability principles for selecting and contracting with suppliers; *Customer relations*, by guaranteeing privacy, health and safety standards, and providing customers with information on responsible behaviour and sustainability issues at their destinations; and *Relations with destinations*, (financial) support to destination stakeholders' efforts for sustainability projects, bring together and integrate different views-interests.

**SCM implementation: critical success factors**

Cigolini et al. (2004) have recently developed and tested a SCM implementation model that not only defines SCM management but it also identifies the constructs for successful SCM implementation and so, the building blocks on which sustainable SCM should be based. Cigolini et al. (2004) identified two categories of SCM-related actions: SC techniques and SC tools. *SC techniques* are the main building blocks through which managers define their SC's main hard framework and control system, shaping its configuration, its management rules, and ultimately determining its performance. SC techniques are related either to the configuration of a SC (e.g. warehouses, retailing system redesigning techniques) or to its management (e.g. JIT) and their main aim is the achievement of cross-functional activities and process alignment amongst chain members. Sustainable SCM is defined here as the SCM technique and aim that the tourism system needs to achieve. *SC tools* are relation-specific assets or investments (e.g. an information system) through which the implementation of one or more SC technique(s) is supported or enabled. The following reviews SCM tools for identifying success factors for implementing sustainable SCM (i.e. the SCM technique).



Cigolini et al. (2004) identified three SC tools namely information tools, co-ordination and control tools, and organization tools. Information tools (e.g. online connections, automated identification systems such as barcodes, shared databases) are utilized to gather, analyze, transmit and share data, regarding customer data, end-to-end inventory status and locations, order status, costs related data and performance status. Data sharing ensures that participating members are able to make use of shared information to help design and deliver products that fulfil customer requirements more quickly and effectively. Visibility of performance metrics enables members to address production and quality issues more quickly permitting more agile demand planning to take place. Co-ordination and control tools are utilized to monitor and influence the decision-making process, by measuring performances and setting rewards based on achievement of certain results. A SC performance metric system including a set of parameters that fully describe the performance metrics of both the whole SC (as perceived by end customers, and of each actor of the chain) is a necessity for ensuring trustworthiness and accountability (Golbratt et al., 2000). Hence, instead of functional-cost-oriented metrics that are often achieved at the expense of another member, integrated metrics are required. However, performance metrics found in the literature are focused internally and do not span across multiple members along the SC (Lambert & Pohlen, 2001). On contrary, members' commitment to continuous improvement and learning is dependent on shared performance metrics (Caplice & Sheffi, 1995; Gunasekaran et al., 2001; Holmberg, 2000). Performance metrics should be continually shared to identify SC bottlenecks in time and enable continuous and accelerating SC performance improvements that contribute to both individual and mutual benefits. Organization tools are needed to support cross-firm communication and co-ordination. Cigolini et al. (2004) considered "interface managers" as a key organizational tool facilitating data transmission, supporting established processes, new project initiation and tight co-ordination. Interface units should be cross-functional and at all managerial levels. Several other authors have identified similar SC tools (see review by Lee & Kindale, 2003). Simatupang & Sridharan (2002) also identified three SC enablers: information sharing, decision synchronization, incentive alignment. Information sharing refers to the ability to see private data in partners' systems and monitor the progress of products as they pass through each process in the SC. Information exchange is widely accepted as an indispensable SC tool (e.g. Stank et al., 1999; Lambert & Cooper, 2000). In assessing members' information sharing capabilities, Shore & Venkatachalam (2003) revealed that such competencies require both hard (i.e. technology systems) and soft (i.e. trust, openness, mutual benefits) factors. Trust and commitment significantly contribute to long term stability of a network (Heide & John, 1990; Lee & Billington, 1992). Decision synchronization is the ability to orchestrate decisions at different managerial levels and time horizons for pursuing common goals of optimizing SC performance (Simatupang et al., 2002). It covers aligning strategic objectives, policies and metrics amongst SC members (operational decisions), synchronizing mutual improvements (tactical decisions) and synchronizing SC planning and execution (strategic decisions). Incentive alignment refers to the process of sharing costs, risks and benefits amongst SC members (Simatupang & Sridharan, 2004). It is considered as a vital factor, as it motivates members to act in a manner consistent with the mutual strategic objectives, e.g. by making decisions that are optimal for all SC, revealing truthful private data. Overall, collaboration in SCM requires three major critical success factors (Simatupang & Sridharan, 2004): information sharing; decision synchronisation; and incentive alignment. Figure 1 illustrates their interconnections.



Information sharing is the starting point for any collaboration in a SC. Information sharing aims to capture and disseminate timely and relevant information to enable decision makers to plan and control supply chain operations. Effective information sharing provides SC visibility and a shared basis for concerted actions by different functions across the SC players. Information sharing may also involve the performance monitoring and reporting of different SC players and so contribute to the SC performance improvement. Decision synchronisation is defined as the ability to orchestrate decisions at different managerial levels and time horizons for pursuing SC common goals. This activity covers aligning strategic objectives, policies and metrics amongst the chain members, synchronising mutual improvements and execution plans. Decision synchronisation encourages SC members to have a sense of belonging in which all decisions work towards a common goal of serving end customers. Incentive alignment refers to the degree that each member shares risks, benefits and costs. This scheme motivates the members to act in a manner consistent with the mutual strategic objectives such as making decisions that are optimal for the SC and revealing truthful private information. The contribution of incentive alignment can be judged based on compensation fairness and accountability. Compensation fairness ensures that aligned

incentives motivate the chain members to share equitable loads and benefits that result from collaborative efforts. An effective incentive scheme also means that SC members are also accountable for aligning individual decisions to mutual objectives of improving total performance.

### **Sustainable SCM in the tourism supply chain**

For a tour operator sustainable SC requires the establishment of a coherent company policy and accompanying management system that set clear targets and actions for economic, environmental and social performance. Key elements of a successful sustainable SCM policy are: information gathering about the current situation of tourism suppliers and destinations as well as of their performance in respective sustainable tourism plans and strategies; decision synchronisation and support amongst the different tourism suppliers and incentive alignment. For implementing each element the following steps should be followed. Effective information gathering and dissemination require an initial establishment and commitment to a sustainability policy and action plan. All SC members need to commit resources and time for the achievement of the sustainability policy as well as integrate this policy in their existing management systems. Moreover, tourism suppliers need to co-agree and break down the sustainable policy in certain actionable sustainable goals and aims. The current state and future performance of all tourism suppliers on these sustainability goals and aims need to be traced and monitored. So, information sharing and gathering should include (TOI, 2004): A *baseline assessment* of tourism suppliers, to assess strengths and weaknesses in their current performance on sustainability, determine priority targets and actions, identify areas for improvement, and generate a baseline against which to measure progress over time and review and modify the sustainable SC policy and action plan; A *system for monitoring and reporting* on progress (as measured against the initial baseline), to ensure that goals have been achieved, identify any potential problems at an early stage, promote transparency, and share results internally and among external stakeholders. Performance standards should be flexible to accommodate different local socio-economic and environmental conditions and the varying sizes and technical capacity levels of suppliers; *Information gathering and dissemination systems and procedures* either through the use of information technology applications as well as the establishment of relevant knowledge managers with appropriate responsibilities and roles.

Information gathering and sharing is the first step based on which tour operators can initiate and foster dialogues and common actions plans amongst all tourism stakeholders. Tour operators are well-placed to support suppliers in improving their economic, environmental and social performance. Tour operators can contact with both tourism demand and suppliers and so they can better orchestrate and integrate information amongst the both. Moreover, because tour operators deal with a wide range of different suppliers, they can more easily gather information on a variety of best practices and facilitate the sharing of experiences amongst suppliers. They also often have access to technology and information that smaller suppliers may have difficulty obtaining on their own. Based on the baseline assessment, the needs and circumstances of tourism suppliers, tour operators can take different actions for creating a common tourism voice and so, synchronising common sustainable SCM actions in tourism. Tour operators can: *Raise awareness* on sustainability issues amongst suppliers; *Create opportunities for developing dialogues amongst different tourism stakeholders*, this is important in order to balance the different and sometimes contrasting interests amongst the different stakeholders; *Offer links to networks* of local, national and international advisers on sustainability and business issues who can provide on-line and on-site assistance to suppliers – for example local experts on environmental and socio-economic issues, possibly in collaboration with local trade associations and non-governmental organizations; *Provide training and practical education opportunities* to suppliers' staff at all levels on reducing resource use and procedures for waste separation and recycling; *Promote the use of eco-labeling schemes* to support improvement and provide information on technical issues tailored to a specific destination; and *Provide technical support* to suppliers on how to improve their sustainability performance, particularly in areas that have been identified as priorities.

However, the effective implementation of good decision synchronisation is not guaranteed without the provision of some incentives to tourism suppliers that motivate the latter's actions towards the attainment of sustainable goals. Thus, the third critical factor for ensuring the implementation of commonly agreed sustainable plans is the provision of incentives to sustainable suppliers by recognising and rewarding improvements on key environmental, social and economic issues. Fully integrating sustainability issues into a tour operator's business and incentive practices will require altering the way purchasing choices are made, suppliers' contracts are written, public relations practices are conducted and internal operations are organised. Ways by which tour operators can reward and motivate tourism suppliers that achieve sustainable goals include: *Integrate sustainability criteria into suppliers' contracts* to set both minimum performance standards that all suppliers of a particular type must meet; *Apply preferential contracting with those suppliers that achieve sustainable goals*; *Set sustainability contracting standards*; *Publicize good sustainable performance internally and externally*, e.g. highlight good performers in catalogs and brochures with a special logo, list specific sustainability actions that each supplier has adopted in the catalogs, present certificates to suppliers who demonstrate the best sustainability performance; establish a database to record information on suppliers' sustainability performance and ensure that the database can be easily used by

all staff who need to access the information it will hold. Where appropriate, integrate the database with existing systems, such as health and safety databases.

## Conclusions

Achieving product and service sustainability nowadays has become a competitive business necessity in tourism. The study has shown that sustainable SCM is a must for achieving sustainability in the tourism industry because of the multi-sectoral and complexity in the tourism product and package. Because tour operators can significantly influence the tourism SC, the paper has proposed a sustainable SCM framework that tour operators would need to adopt for promoting sustainability in tourism. The framework was based on Simatupang & Sridharan (2004) collaborative SCM model that required the existence of three major factors: information sharing, decision synchronisation and incentive alignment. The implementation of such a model by tour operators as well as its applicability and sustainability value in the tourism SC are showed. However, future research should further investigate the adoption of sustainable SCM not from the tour operators' but also from other tourism suppliers' point of view. Future studies should investigate the circumstances under which tourism suppliers will be willing and be able to adopt such SCM sustainable practices. To commit resources and time for achieving sustainable goals, tourism suppliers should be guaranteed long term partnerships and tourists' volume from tour operators. Otherwise, tourism suppliers may see none benefits in working together and complying to tour operators' sustainable plans. Hence, by adopting a tourism suppliers' perspective, these and other vital circumstances for implementing sustainable SCM should be examined.

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## The Determinants of Derivative Use in the Hospitality Industry

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### Abstract

This study investigates the determinants of the decision to hedge and the extent of hedging in a sample of hospitality firms over a 5-year period from 2000-2004. The findings document that hospitality firms predominantly use interest rate swaps and options to manage interest rate risk. The results are also consistent with the theory on hedging, and show that underinvestment costs, financial distress costs, managerial risk aversion, cash flow volatility, and firm size, to be significant determinants of the decision to hedge. On the other hand, financial distress costs, foreign exchange exposure, and operational hedging, are significantly related to the extent of hedging.

Key Words: determinants, derivatives, exposure, volatility, hedging

### Introduction

Firms in the hospitality industry face significant risks from fluctuations in interest rates, exchange rates, and commodity prices. Exposure to these risks is costly because it induces volatility in cash flows and earnings which can negatively impact the profitability of the firm (Smith and Stulz, 1985). If exposure is costly, then hospitality firms have incentives to reduce their exposure by reducing the volatility of their cash flows and earnings. Many hospitality firms today have begun using derivative financial instruments such as options and swaps, to reduce the volatility of their cash flows and earnings. For example, Starwood Hotels and Resorts disclosed that it seeks “to reduce earnings and cash flow volatility associated with changes in interest rates and foreign currency exchange rates by entering into financial arrangements to provide a hedge against a portion of the risks associated with such volatility. Interest rate swap agreements are the primary instruments used to manage interest rate risk”(Starwood 10-K Report, 2005).

Thus far, there is limited or no previous research examining the extent and use of derivative instruments in the hospitality industry. Hospitality firms such as casino firms and real estate investment trusts (REITs) are capital intensive firms that rely heavily on debt financing for their capital expenditures, often exposing these firms to substantial risk from changes in interest rates. Many hospitality firms such as Marriott, Starwood, and Hilton, have also expanded internationally so there is a growing need to manage foreign exposure. Research by Bodnar et al. (1998) has indicated that almost half of all service firms use derivatives, and that these firms were also twice likely than manufacturing firms to have increased their usage of derivatives. If hospitality firms actively use derivatives, then what factors influence the decision to use derivatives and to what extent are firms using derivatives? Our purpose in this study is to investigate the determinants of derivative use among publicly traded REITs, lodging firms and casino firms. This study will contribute new evidence and complement the existing finance literature on derivatives. Researchers, industry practitioners, regulators, and financial statement users will find this information relevant and informative in understanding firm hedging strategies and the factors that influence the hedging decision.

### Literature Review

Several theories have been proposed in the corporate finance literature to provide the reasons for hedging. The corporate finance theory identifies situations where firms have incentives to hedge. The theory of risk management proposes that managers have incentives to reduce underinvestment costs, reduce taxes, reduce costs of financial distress, avoid managerial risk, and reduce information asymmetry. Most of the empirical research on hedging has focused on the characteristics that determine a firm's decision to hedge and the extent of its hedging, and whether this behavior is consistent with theory.

Myers (1977) characterizes a firm's investment opportunities as options and demonstrates that with fixed claims in a firm's capital structure, taking a positive net present value (NPV) project can reduce shareholder's wealth if the gains accrue primarily to debt-holders. Consequently shareholders have incentives to forgo positive NPV projects to avoid a wealth transfer. Myers calls this an underinvestment problem. Without hedging, firms are more likely to pursue suboptimal investment opportunities. In an imperfect market, if a firm defaults on its financial obligations, the firm will likely incur financial distress costs and potentially end up in bankruptcy. If financial distress is costly to the firm, then

managers have incentives to reduce it. Smith and Stulz (1985) argue that hedging is one method by which a firm can reduce the volatility of its earnings. The probability of hedging is therefore higher for firms with greater amounts of debt in their capital structure (Geczy et al., 1997). Smith and Schulz (1985) also show that firms have incentives to hedge for tax reasons. Tax preference items such as tax-loss carry-forwards can increase the cash flows to the firm. The theory predicts that the probability of hedging is positively associated with these tax incentives. According to Stulz (1984), corporate hedging also stems from managerial risk aversion. Since managers have substantial amounts of capital and wealth invested in the firm, they would be concerned about bearing an excessive amount of this risk. Consequently, managers have incentives to use derivatives to reduce the volatility of their compensation. If informational asymmetries exist between managers and shareholders, Demarzo and Duffie (1995) show that hedging can improve the informational content of a firm's earnings as a signal of management ability, thereby reducing the amount of uncertainty about the firm's activities. In addition to using derivatives to manage exposure to risks, firms can also manage risks in alternative ways as part of their overall risk management program. Previous research has documented the use of operational hedges such as geographic diversification in managing risk exposures (Allayannis et al., 2001). Firms may also use natural hedges by altering their balance sheet asset or liability characteristics to reduce interest rate exposure.

### **Measurement of Variables**

To measure the decision to use derivatives, we use a binary variable, that is equal to one if a firm explicitly discloses that it uses derivatives and zero otherwise. We ensure that firms that are classified as non-users are not hedging other risks as well. This selection process consequently overcomes a weakness in prior studies by excluding firms in the non-user group that are hedging risks other than interest rate exposure. To measure the extent or amount of hedging, we use the notional value or contract value of derivatives defined as the aggregate notional value of all reported derivative contracts outstanding at the end of the fiscal year for each firm and scaled by the book value of assets. Scaling by total assets also reduces the variation in observed characteristics between large and small firms.

We include several financial proxy variables that have been shown to affect the decision to hedge and the amount of hedging. We use the market-to-book ratio (market value of equity/book value of equity) as a proxy for underinvestment costs based on the assumption that firms with higher growth opportunities have greater incentives to hedge. Financial distress costs are measured using two solvency ratios, a leverage ratio (total long-term debt/total assets) and an interest coverage ratio (income before interest and taxes/interest expense). If managers own a large portion of the firm's wealth in the form of stock options, then they have incentives to manage volatility of their earnings (Smith & Stulz, 1985). Managerial risk aversion is measured as the logarithm of the total number of CEO stock options outstanding at the end of the fiscal year. Prior research has also suggested that firms with smooth and stable cash flows and earnings are more likely to be followed by analysts (Barton, 2001). Therefore, the greater the number of analysts following the firm, the lower will be the information asymmetry and lower the incentive to hedge. The logarithm of the number of analysts following the firm in each year is used to proxy for information asymmetry. Graham and Smith (1999) provide evidence that existing net operating loss carry-forwards (NOLs) provide a tax incentive to hedge for firms that expect to be profitable. The tax incentive to hedge is measured using a dummy variable that is equal to one in the fiscal year when the firm is profitable and has NOL carry-forwards, otherwise it is zero. Since economies of scale are an increasing function of firm size, the log of the book value of assets is used to proxy for firm size.

To control for a firm's cash flow volatility, we use the coefficient of variation, defined as the standard deviation of quarterly income before depreciation divided by the absolute value of the mean. The relevant measure of cash flow is pre-hedging earnings before interest because the risk hedged by interest rate derivatives is associated with interest expense. To control for exchange rate exposure, we include the foreign sales ratio measured as the ratio of foreign sales to total sales for each firm-year (Allayannis & Ofek, 2001). We also include the quick ratio as a proxy variable for hedging substitutes since firms with higher amounts of internal funds (higher liquidity) can reduce potential financial distress and lower the incentive to hedge. Finally, to control for alternative ways of managing risk (operational hedging), we measure the degree of product diversification using the entropy index proposed by Palepu (1985). This index ranges from zero for an undiversified firm to a value of over two for a highly diversified firm.

### **Research Design**

In addition to descriptive statistics, we compare derivative users and non-users on various firm characteristics that proxy for the incentives to hedge. We use both parametric and non-parametric tests of differences for the univariate analysis. The non-parametric tests of differences are more informative and likely to declare a significant difference when the data is skewed or in the presence of outliers. For the multivariate analysis, we regress derivative use on the variables that proxy for the incentives to hedge. Because derivative use is only observed for firms that use derivatives, our results could be driven by sample selection bias. Therefore, we use Heckman's (1979) two-step estimation model to control for sample selection bias. In the first step, we run a binomial probit model (selection equation) on the entire sample of firms to

predict the probability of the decision by hospitality firms to use derivatives. In the second step, using only a sub-sample of derivative users, we regress notional values on the explanatory variables and expected error (Mills ratio) to measure the extent of using derivatives.

### Sample Selection and Sources of Data

The sample for this study was chosen from a list of 84 publicly traded hospitality firms in the Standard & Poors' *Compustat* database based on their 4-digit Standard Industrial Classification (SIC) code of 7011 (lodging), 6798 (REIT), and 7990 (gaming). The list of hospitality 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. Firms with less than five years of annual reports were dropped from the sample because derivatives data is gathered from these reports. We also dropped non-publicly traded firms, firms that were in Chapter 11 bankruptcy and firms that were acquired by other firms. As a result, 37 hospitality firms were dropped from the sample leaving a final sample of 47 hospitality firms with 235 firm-year observations over the 5-year sample period. Annual and quarterly financial statement data, analyst data, and information on geographic segments, was obtained from the *Compustat* database while information on derivatives and managerial stock options was gathered from annual 10-K reports and proxy statements filed with the SEC in the *Edgar* Database.

### Results

The descriptive statistics show the average hospitality firm held mean (median) assets of \$2.44 billion (\$1.16 billion) and generated \$1.17 billion (\$514 million) in net sales over the sample period (Table 1). Hospitality firms earned mean (median) operating income before depreciation of \$282 million but a number of firms showed negative earnings because of the prevailing recessionary conditions and events of 9/11 at the time.

Table 1  
Summary Statistics of Hospitality Firms (47 firms)

Variable	Mean	Median	Std. Dev.	Min.	Max.
Total Assets (\$mil)	2,438	1,155	3,161	36	12,660
Log of Assets	6.99	7.05	1.36	3.59	9.44
Net Sales (\$mil)	1,166	514	1,781	9.7	10,152
Operating Inc. before Dep. (\$mil)	282	124	357	-9.91	1,509
Cash Flow Volatility	0.94	0.33	3.37	0.04	48
Long-term Debt (\$mil)	1,181	465	1,600	19.2	5,870
Long-term Debt/Total Assets	0.50	0.49	0.19	0.06	1.25
Times Interest Earned Ratio	1.73	1.60	2.03	-6.26	10.87
Market-to-Book Ratio	1.05	1.24	5.28	-71.45	7.51
Foreign Sales Ratio	0.05	0	0.17	0	0.99
Product Diversification	0.34	0	0.50	0	2.02
Number of Analysts	11	7	9	1	30
Log of Analysts	1.39	1.39	1.24	0	3.4
Number of CEO Options (000)	1,470	826	2,129	10	12,000
Log of CEO Options	9.71	12.76	6.13	0	16.30
Quick Ratio	0.80	0.65	0.59	0	3.75
Tax	0.07	0	0.26	0	1
Notional Value (NV) of All Derivatives	369	150	516	1	2,926
NV of Hedging Derivatives	386	183	533	3	2,926
NV of Speculative Derivatives	118	45	171	1	760
NV of Hedging/Total Long-Term Debt	0.34	0.20	0.51	0	3.49
NV of Hedging/Total Assets	0.13	0.10	0.12	0	0.60

We find that hospitality firms are heavy users of long-term debt in financing their assets. Total long-term debt accounted for an average (median) of 50% (49%) of total assets while the interest coverage ratio shows a mean (median) times-interest-earned ratio of 1.73 (1.60). Prior to the use of interest rate derivatives, fixed-rate debt accounted for an average of 64% of total long-term debt. After incorporating the use of swaps to alter the exposure, the proportion of fixed rate debt increases to 69%. The overall final interest rate exposure of hospitality firms in general indicates a preference for fixed interest rate exposure. Even though some hospitality firms have expanded overseas, the ratio of foreign sales to total sales is still small, comprising an average of only 5%. The results also show that hospitality firms have low product diversification, are closely monitored by an average of 11 analysts and the average CEO of a hospitality firm holding 1.47

million in unexercised stock options. Out of the 47 sample firms, 38 firms (81%) have used derivatives during the sample period while the other nine firms disclosed no derivative use. Only one hospitality firm, a derivative user, disclosed the use of any natural hedges to manage exposure. In all cases, interest rate exposure is the dominant risk hedged by lodging firms. Of the 38 hospitality derivative user firms, 15 firms had some international exposure; however, only four firms managed foreign currency exposure with derivatives. The remaining 11 firms disclosed the amount of foreign exposure as immaterial to effectively use derivatives. Almost all hospitality derivative users (37 out of 38 firms) managed exposure with interest rate swaps (65%), by far the most popular derivative instrument used followed by options (23%) and forwards (12%). The data in Table 1 also show the mean (median) notional value for all derivatives (including speculative derivatives) contracts at \$369 million (\$150 million). The total notional value of hedging derivatives represented an average of only 34% of total long-term debt, evidence that hospitality firms manage some but not all of their exposure with derivatives. Hospitality firms prefer to maintain some but not all of their long-term debt at floating rates but will alter this exposure with swaps when conditions warrant. Based on an analysis of firm disclosures, we conclude that hospitality firms employ derivatives to hedge their liabilities, primarily floating rate debt. An estimated 80% of the notional values of all derivatives for all firms are employed to hedge liabilities, 6% on equity, and 4% on assets with the remainder being speculative.

Table 2  
Tests of Differences in Firm Characteristics between Users and Non-Users

	Prediction	Users	Non-Users	T-stat (Z-stat)
<b>Market-To-Book Ratio<sup>+</sup></b>				
Mean (Median)	U>NU	1.64 (1.37)	0.89 (1.02)	-4.03*** (-3.49***)
<b>Leverage (Long-term Debt Ratio)</b>				
Mean (Median)	U>NU	0.51 (0.50)	0.46 (0.48)	-1.51 (-1.18)
<b>Times Interest Earned</b>				
Mean (Median)	U>NU	1.70 (1.60)	1.83 (1.32)	0.40 (0.13)
<b>CEO Options (Log of Options)</b>				
Mean (Median)	U-NU=0	10.54 (13.02)	6.22 (0)	-3.96*** (-3.38***)
<b>Taxes</b>				
Mean (Median)	U-NU=0	0.06 (0)	0.11 (0)	0.95 (1.11)
<b>Firm Size (Log of assets)</b>				
Mean (Median)	U>NU	7.21 (7.18)	6.02 (6.62)	-5.39*** (-4.45***)
<b>Cash Flow Volatility<sup>+</sup></b>				
Mean (Median)	NU>U	0.54 (0.31)	0.79 (0.62)	2.03** (1.67**)
<b>Analysts (Log of Analysts)</b>				
Mean (Median)	U>NU	1.56 (1.61)	0.67 (0)	-5.07*** (-4.36***)
<b>Foreign Sales Ratio</b>				
Mean (Median)	U>NU	0.06 (0)	0.01 (0)	-3.78*** (-1.35*)
<b>Product Diversification</b>				
Mean (Median)	U>NU	0.30 (0)	0.47 (0.17)	1.75** (1.68**)
<b>Quick Ratio</b>				
Mean (Median)	NU>U	0.79 (0.65)	0.83 (0.68)	0.32 (0.50)

<sup>+</sup> These variables were winsorized for severe outliers for the t-tests only. Prior to winsorization, the results are insignificant for both variables but after winsorization, only the market-to-book ratio is significant. "U" represents user and "NU" represents non-user. \*\*\*, \*\*, \*, represents significance at 1%, 5% and 10% levels respectively based on one-tailed predictions, two-tailed otherwise

Table 2 provides a comparison of derivative users and non-users on various firm characteristics that proxy for the incentives to hedge. The results show derivative users to be significantly larger with higher growth opportunities than non-users. On the other hand, despite having higher leverage and better interest coverage, derivative users are insignificantly different from non-users. Results on the proxies for managerial risk aversion, information asymmetry and the foreign sales ratio also show significantly higher values for derivative users compared to non-users. In contrast, non-users have significantly higher cash flow volatility and higher product diversification than derivative users. Without the benefits of derivatives in reducing volatility, non-user firms have to diversify their operations to mitigate exposure.

Table 3  
Determinants of the Decision to Hedge

Independent Variables	Predicted Sign	User Coeff. (z-stat)	NV Coeff. (z-stat)
Intercept	+/-	-5.447 (-3.67)***	-0.102 (-0.66)
Market to Book Ratio	+	0.356 (2.89)***	0.003 (0.47)
Leverage (Long-term Debt)	+	2.858 (3.17)***	0.073 (1.10)
Times Interest Earned	-	0.001 (0.02)	-0.015 (-3.47)***
Analysts	-	-0.313 (-1.76)**	-0.010 (-0.92)
CEO Options	+/-	0.076 (3.49)***	0.003 (1.31)
Taxes	+	-0.313 (-0.74)	
Firm Size	+	0.622 (3.87)***	0.018 (1.38)
Cash Flow Volatility	+	0.362 (1.64)**	-0.019 (-1.07)
Foreign Sales Ratio	+	7.207 (1.05)	0.119 (1.54)
Product Diversification	+/-	-0.261 (-1.23)	0.059 (3.13)***
Quick Ratio	-	-0.183 (-1.01)	-0.019 (-1.29)
Mills Ratio	+/-		0.046 (0.65)
Observations		235	190
Pseudo R <sup>2</sup>		0.3001	
% Correctly Predicted		91%	

Notes: \*\*\*, \*\*, \*, represents significance at 1% and 5% levels respectively based on one-tailed predictions, two-tailed otherwise. Cash flow volatility and market-to-book ratio are winsorized to reduce the undue influence of extreme outliers. The dependent variable for the probit model equals 1 for derivative user; 0 otherwise. NV represents a truncated regression in which total notional value of hedging derivatives/book value of assets is the dependent variable.

The multivariate results of the Heckman model are presented in Table 3. The first equation is a probit model to test the factors that affect the decision to hedge while the second equation tests the extent of hedging. The results show both the market-to-book ratio and leverage ratio to be significantly affecting the decision to hedge, implying that hospitality firms with higher growth opportunities and higher leverage are more likely to use derivatives, consistent with the theory of risk management. We also find that close monitoring of firms by analysts lowers the incentive to hedge. Although the proxy for managerial risk aversion represents a crude proxy for the convexity of options, it is nevertheless significant, suggesting that managers with greater option holdings are more likely to hedge. Consistent with prior research, firm size affects the incentive to hedge with larger firms more likely to hedge given economies of scale. The significantly positive coefficient for cash flow volatility implies that firms with high cash flow volatility have greater incentives to use derivatives. Since the Heckman model shows no sample selection bias (insignificant Mills ratio), we rerun our tests using ordinary least squares regression (OLS) to explain the extent of hedging in Table 4.

The results show financial leverage, as measured by the interest coverage ratio, is a significant determinant of the extent of hedging. Once a firm has decided to hedge, the interest coverage ratio significantly predicts the amount of hedging. Higher coverage ratios imply a lower extent of derivatives usage because firms have sufficient cash flow to meet financial obligations. The proportion of foreign sales is a significant determinant of the extent of hedging when hospitality firms expand internationally. Finally, we observe a significantly positive relation between diversification and hedging, suggesting that hospitality derivative users with low levels of product diversification engage in a greater level of hedging.

### Summary

The purpose of this study was to investigate the determinants of the decision to hedge and the extent of hedging in a sample of hospitality firms over a 5-year periods from 2000-2004. The overwhelming majority of firms disclosed that they use derivatives to hedge their interest rate exposure. This study provided evidence to show the predominantly use of interest rate swaps and options among hospitality firms to manage interest rate risk. We identify several firm characteristics that explain the incentives to hedge; findings that are generally consistent with the theory on hedging. The results indicate underinvestment costs, financial distress costs, managerial risk aversion, information asymmetry, cash flow volatility, and firm size, to be significant determinants of the decision to hedge. On the other hand, financial distress, foreign exchange exposure, and operational hedging, are significantly related to the extent of hedging. Furthermore, these results show that the determinants that affect the decision to hedge are different from the factors that affect the extent of hedging.



Table 4  
Determinants of the Extent of Hedging by Derivative Users

Independent Variables	Predicted Sign	Model 1 Coeff. (t-stat)	Model 2 Coeff. (t-stat)
Intercept	+/-	0.023 (0.26)	-0.033 (-0.39)
Market to Book Ratio	+	0.002 (0.40)	0.000 (0.06)
Leverage (Long-term Debt)	+	0.030 (0.43)	0.048 (0.70)
Times Interest Earned	-	-0.013 (-2.94)***	-0.015 (-4.04)***
Analysts	-	-0.018 (-1.33)	-0.010 (-0.77)
CEO Options	+/-	0.003 (1.87)	0.003 (1.58)
Taxes	+	0.047 (1.15)	0.053 (1.28)
Firm Size	+	0.008 (0.82)	0.013 (1.36)
Cash Flow Volatility	+	-0.022 (-1.53)	-0.021 (-1.59)
Foreign Sales Ratio	+	0.091 (2.41)***	0.094 (2.55)***
Product Diversification	+/-	0.057 (3.04)***	0.065 (3.67)***
Quick Ratio	-	-0.012 (-0.83)	-0.016 (-1.22)
Observations		190	190
F-Value		3.02***	5.39***
R <sup>2</sup>		0.12	0.17

\*\*\*, \*\*, \*, represents significance at 1% and 5% levels respectively based on one-tailed predictions, two-tailed otherwise. Cash flow volatility and market-to-book ratio are winsorized to reduce the undue influence of extreme outliers. T-statistics are based on White heteroskedasticity robust standard errors. Dependent variables for Model 1 and 2 are as follows: Total notional value of all derivatives/Book value of assets; Total Notional value of hedging only derivatives/Book value of assets.

Given the rapid growth in derivative markets and a reduction in the cost of using derivatives, the implication for hospitality managers is significant. Derivative instruments such as interest swaps can provide a low cost, flexible, and beneficial tool among an array of tools, to hedge interest rate exposure if they are used as part of an overall corporate risk management program. Within this risk management framework, hospitality managers must identify and assess potential risk exposures, and implement cost-effective risk management strategies including derivatives to reduce exposure to risk. For example, managers can use interest swaps or caps to manage market risk exposures that arise from fluctuations in interest rates. If hospitality managers use derivatives effectively, they can reduce firm risk and the volatility of their cash flows and earnings and increase firm value (Allayannis & Weston, 2001).

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## Competitive Advantage Through Service-Orientation: Strategic Directions for the Hospitality Industry

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### Abstract

This study identifies the importance of service quality for the attainment of organizational performance in the hospitality industry. It examines the literature to identify hierarchical factors that act as antecedents to service orientation. The study proposes a conceptual model and elaborates on the need for service firms to direct their service orientation according to factors external to the firm. It also posits that service orientation is an evolving construct that must change as the needs of customers change. It is suggested that service orientation should serve as a strategic initiative rather than only as a tool used to measure employee attitudes.

**Key Words:** Service orientation, service climate, organisational performance

### Introduction

It is well-accepted that service quality has emerged as an irrepressible and globally pervasive strategic initiative in today's hospitality industry marketplace. Rapert and Wren (1998, p. 223) suggest that "...firms with a deeply ingrained service quality orientation often develop both an intrinsic culture and an extrinsic reputation which tends to be very enduring and difficult to copy." Creating an orientation towards service quality (or a 'service orientation') can be challenging, particularly in people-intensive industries such as the hospitality industry, because of the reliance on front-line employees to facilitate effective 'service encounters' (e.g., Bitner, Booms, & Mohr, 1994; Gronroos, 2000; Lee-Ross, 2001; Zeithaml & Bitner, 1996). Industry leaders as Ritz-Carlton, Hyatt, Hilton, Marriott and Intercontinental Hotels, all have significant service quality training programs focused on quality employee-customer interactions, that have been vital for the successes of those organisations (Kandampully, 2002).

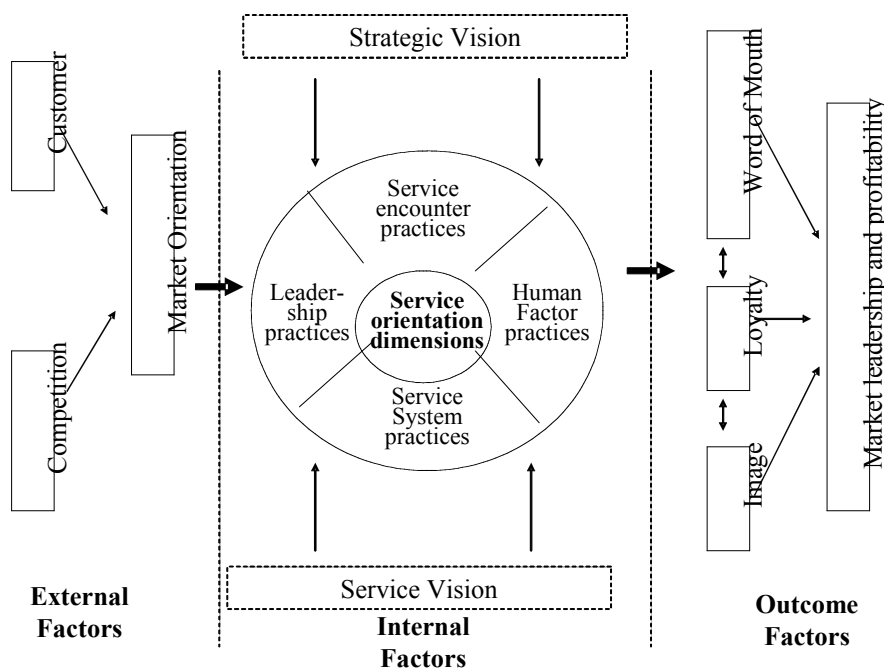
One of the inherent challenges in people-reliant businesses is the difficulty in managing each and every one of these employee-customer interactions which are deemed so vital in the overall perception of service quality (Lee-Ross, 2001). Carlson's (1987) 'moment of truth' approach to service encounters recognizes that managers and owners cannot have direct control of the service process nor can managers observe or provide feedback on every service encounter. Therefore, the ultimate aspiration for such businesses would be to create an atmosphere where service and customer satisfaction is the *predominant norm*. Schneider et al. (1994) reiterate this notion, reaffirming the need for some way for service organizations to overcome the absence of direct control. If a firm is seen by its employees as having an atmosphere where service excellence is inherently expected, the firm is said to have a 'climate' for service (or a service orientation). Such an orientation can aid managers by acting as a 'stand-in' for direct supervision. Despite the logical association between hospitality businesses and the importance of creating a service orientation, there has been limited attention given to the study of service climate or service orientation within a hospitality context.

The premise of this paper is that hospitality firms would benefit greatly from understanding the nature and components of a true service orientation, and that a genuine service orientation is the *vital link* between internal customers and external customers. In a service-oriented firm, the firm's employees and the firm's external customers effectively collaborate as partners in ensuring that marketing, operations, and human resources all enhance the efficiency and distinctiveness of the service offering. In this way, the firm's service-oriented business strategy becomes an embedded strategic initiative, rather than a transitory project that is monitored intermittently with employee surveys.

The present paper argues that hospitality firms would benefit from a service orientation, and that such an orientation should be customer and market-driven. As shown in the central panel of Figure 1, market-related factors (including strategic service vision and service concept) are antecedents and continual drivers of a service orientation. A number of managerial practices (relating to leadership, service encounters, the human factor, and service systems) are centred on this service orientation. Once employees perceive that management practices are focused on service, only then can a firm profess to be truly service-oriented. Once the firm has a market-driven, service-oriented strategy, and the employees see this in the actions of management, certain outcomes (as discussed below) will naturally follow.

Although this study is conceptual in nature, the conceptual model proposed has strong theoretical support and practice-based evidence across many service industries. The study makes three important contributions to the present body of knowledge in services management.

Figure 1  
The relationship between external, internal and outcome factors of the firm



The first contribution is that a service-oriented strategy should receive its direction from factors that are external to the firm—its customers, competition and business environment. An effective service-oriented strategy cannot be based on research from *other* markets and *other* industries. Much of the previous literature on service orientation has failed to recognise the importance of service-oriented dimensions drawn from immediate external factors.

The second contribution is that a customer-focused service orientation should be developed on an ongoing basis as the needs of customers evolve. Today's marketplace is continuously changing, and service firms should ensure that specific aspects of its service delivery remain attuned to changing requirements. The imperatives of service orientation are evolving rather than enduring.

The third contribution is that a strategic focus on service orientation should be seen as a *proactive* initiative. Although the literature describes service orientation as an organisation-wide embrace of policies, practices, and procedures that are intended to support behaviour that facilitates service excellence (Lytle, Hom, & Mokwa, 1998), this construct has been primarily used as a *measurement* tool, rather than as a strategic planning tool. In contrast, the present study suggests that a service orientation should represent a proactive strategic focus.

### Conceptual Model

The present study develops a three-phase model of a service-oriented strategic path. The model incorporates the factors that enhance trust and commitment among service employees in fulfilling the firm's strategic vision of service orientation. The paper thus provides a theoretical framework for understanding how market-oriented evidence can enhance a firm's service orientation, organisational performance, customer-perceived value, and competitive advantage.

### External factors

The left panel of Figure 1 shows the external information (information about both customers and competing offerings) required for a market orientation. Such information provides a firm with a firm basis upon which to decide the direction that the firm is to follow. A market orientation is widely considered to be the key to superior business

performance (Baker & Sinkula, 1999; Day, 1994; Morgan, Katsikeas & Appiah-Adu, 1998; Slater & Narver, 1995; Slater & Narver, 1994). Slater (1997) has argued that the provision of superior customer value is critical to superior market performance and profitability. Knowledge of the competition and customers allows a firm to assess its market position and market trends, and facilitates the setting of higher standards of performance in that market. A market orientation thus provides direction for the firm's service orientation.

### **Internal factors**

Once the firm's market orientation is established, it should then focus on the internal factors that contribute to a service orientation (as shown in the central panel of Figure 1). The firm must select those dimensions of service orientation that most fit with the changing needs of the marketplace (as identified above under 'External factors').

#### *Nature of a service orientation*

The term 'service orientation' was used initially in relation to personality traits. It was assumed that people who possessed certain personality traits (such as concern, empathy, and conscientiousness) would be more adept at customer service (Martin & Fraser, 2002). The term has since evolved, and is now understood in terms of a strategic dimension of management (Lytle et al., 1998; Schneider & White, 2004). The term thus carries two broad meanings—(i) a reflection of employee perceptions about practices, policies and procedures in the workplace (i.e., climate); and (ii) a dimension of an organisation's overall strategy and culture.

Service orientation can be examined at these two levels: First, at the individual level, it can be examined in terms of the service orientation of individual employees (Homburg, et al. 2002). This includes concepts such as 'empowerment' and 'moments of truth', which assist in nurturing personal initiative in service orientation. The second level at which service orientation can be examined is at the organisational level; this refers to both internal organisational factors (such as internal design characteristics, organisational structure, training, policies, and the like) and external strategic factors (such as a firm's orientation towards service as a marketing strategy) (Homburg, et al. 2002).

The concept of 'service orientation' has certain parallels in the literature with the notion of 'organisational climates'. Because several 'climates' can co-exist within an organisation, the notion of 'climate' is most effective when it is used as a specific construct that leads to a defined purpose—for example, innovation, safety, or service (Schneider et al., 2000; Schneider, Gunnarson & Niles-Jolly, 1994). In these terms, a firm can be said to have a 'service orientation' when it has a recognisable and defined 'service climate' (Lynn, Lytle, & Bobek, 2000; Lytle et al., 1998; Schneider & White, 2004).

Climates are measured by soliciting the collective perceptions of employees regarding certain practices, procedures, and behaviour in the workplace that are expected, supported, and rewarded. A climate helps individuals to determine how they should behave—based on the way they think and feel about various aspects of the work environment. In the case of a service orientation, the focal point is the degree to which employee efforts are directed towards service quality and customer satisfaction (Hogan et al., 1984; Schein, 1985; Schneider & Bowen, 1993; Schneider, Brief & Guzzo, 1996; Schneider, White & Paul, 1998). In one example of service climate measure, Lytle et al. (1998) identified the 'best in class' service practices that represent a service climate (which they termed 'service orientation'). The review resulted in a framework of four dimensions and ten fundamental elements of service orientation. These dimensions will be reviewed later.

Service-climate dimensions have usually been created qualitatively by asking employees and managers to assess the importance of various factors in creating an atmosphere conducive to the delivery of service. However, these factors are often carried over from one year to the next with minimal regard for the changing needs of customers. To be truly service orientated, a firm should constantly reassess customer and marketplace needs. Past research into both 'service climate' and 'service orientation' has failed to adequately address these changing requirements.

#### *Defining the nature of a service orientation*

A service orientation is important because it is conceptually and empirically linked with customer satisfaction. Many studies have established links between the dimensions of a service climate or service orientation (in terms of employees' perceptions of management practices) and customer perceptions of service (Solnet & Paulsen, 2005; Johnson, 1996; Schmit & Allscheid, 1995; Schneider & Bowen, 1985; Schneider et al., 1980; Schneider et al., 1998; Wiley, 1991). A definite correlation has been demonstrated between: (i) *customers' experiences* (what employees say customers experience and what customers report that they experience); and (ii) *employees' experiences* (especially the specific aspects of employees' experiences that most strongly relate to customer satisfaction). Heskett et al. (1997) have used the term 'satisfaction mirror' to describe this connection between employees' experiences and customers' experiences.

### *Service orientation - antecedents*

There is a view that a service orientation is a gestalt of perceptions across a range of dimensions (Lytle et al., 1998; Schneider et al., 2000). This approach has merit; however, it might not adequately portray the whole picture. This is because the climate approach, which allows for direct measurement of employees' perceptions, represents a *final evaluation* of the service climate—rather than providing guidance on *how to achieve* the outcomes that reflect a 'positive' service orientation. Although previous studies have provided contributions to this question of how to achieve a service orientation, the present study identifies a *market orientation* as the most important precursor to a successful service orientation.

Figure 1 shows two primary antecedents of service orientation: a *strategic vision*: which is value-driven and which provides direction for every aspect of a firm's function; and a *service vision*: which is closely aligned to the strategic vision, but which focused on the firms' *service* performance. Each of these is discussed below.

#### *Strategic vision*

In a competitive market, a firm that maintains market leadership has an overall vision that differs markedly from its competitors. This vision 'personifies' the firm with a value-driven commitment and far-sighted strategic aim that goes beyond mere financial performance to serve as an example of leadership in the industry.

Such a distinctive and farsighted vision facilitates trusting relationships with both internal and external customers. The vision creates a mindset within the organisation that is dedicated to customer satisfaction and service quality, and provides employees with motivation to take up the challenges and opportunities provided by empowerment in going beyond their job tasks and creating memorable 'moments of truth'. Companies such as Marriott, Disney and Southwest are not temporary leaders in their market categories; rather, they are visionaries who have consistently outperformed their competitors. They do this by creating and maintaining genuine relationships with employees and customers alike. In doing so, they proactively seek opportunities to reorient the firms' internal processes, systems, and structures according to their vision.

#### *Service vision*

The service vision communicates to customers and stakeholders how the firm will innovatively create and consistently deliver the firm's service promise. A service vision is not confined to what is written on wall posters or in staff handbooks; rather, it should be conceptually and functionally ingrained in the organisation from the boardroom to the 'shop floor' (Kandampully, 2002). The service vision should communicate what the organisation is, what it does, and what it values (Rust, Zahorik & Keiningham, 1996; Rust, Zeithaml & Lemon, 2000). The service vision represents the firm's self-awareness of itself as a service organisation. This self-awareness is not so much a representation of the products and services that are offered; rather, it defines the results that the firm wishes to produce for customers—in terms of tangibles, intangibles, and experiences.

The service vision should be at the forefront of service-orientation strategies—an organisational 'manifesto' that clearly articulates the goals and objectives of the firm (Lytle et al., 1998). According to Berry (1995), the firm's vision energises the organisation and defines the word 'service'. Leading service organisations meticulously fine-tune and orchestrate every employee, every process, and every system to produce a compelling vision of superior service.

### *Service orientation - dimensions*

The extensive literature on service orientation contains many variations on the number and nature of the practical dimensions of the construct (Johnson, 1996; Lytle et al., 1998; Schneider & Bowen, 1985; Schneider et al., 1980; Schneider et al., 1998). Drawing largely on the work of Lytle et al. (1998), the present study identifies four important practical dimensions of service orientation: service-encounter practices; leadership practices; human-factor practices; and service-system practices.

The first important dimension relates to the service encounter, defined as the interaction between a customer and a firm through its frontline employees (Bitner et al., 1994; Shostack, 1977; Bitner, Brown, & Meuter, 2000; Zeithaml, Berry & Parasuraman, 1988). The outcomes of service encounters thus depend on the skills, knowledge, personality, behaviour, and performance of these employees (Mills, 1986; Reisinger, 2001). If successful, these outcomes can include satisfaction, loyalty, and positive word-of-mouth recommendation. It is therefore imperative that service firms understand how to manage these critical service encounters (Bitner et al., 2000).

To ensure that the importance of service encounters is realised in practice, firms need well-developed service systems, the second relevant dimension of a service orientation. An organisation's rules, regulations, policies, and structures should be set in place to enable employees to serve their customers better. If such systems are not in place, systems should be created or redesigned to remove any obstacles that restrict employees' freedom to offer exceptional

quality of service. It should not be necessary for employees to, in effect, work *against* the system in meeting their customers' special needs.

The third dimension is leadership, a crucial ingredient in creating and maintaining a positive service orientation because leadership attitudes and practices direct and shape the climate of an organisation (Heskett et al., 1997; Lytle et al. 1998). If the leaders of a firm demonstrate, through their own actions, that they consider customer service to be of the greatest importance, employees will behave towards customers with a similar sense of commitment. In this way, management creates a service orientation through example, rather than by simply dictating policy. This aspect of leadership is similar to the rationale of internal service quality—whereby managers aim to provide excellent service to their employees who, in turn, are motivated to provide excellent service to their external customers (Heskett et al., 1997).

The final broad dimension of a service orientation relies on the service employees of the organization, or the 'human factor.' Knowledgeable and talented employees are increasingly recognized as being essential in the innovative world of modern business, and managers must nurture and develop 'competitive intelligence' at every level of the organization if it is to build a competitive advantage (Peters 1994; Hamel & Prahalad, 1989). A similar view was articulated by the chairman of Sony, Morita (1988), who stated that it is not the manual labor of employees that allows a company to dominate a global market, but the contributions of the employees' minds. Exceptional service that delights customers requires continuous development of service—not in terms of what is being offered, but in terms of how it is being offered. The role of service personnel has thus become increasingly important in the customer's perception of service value (Grieves and Mathews, 1997).

### **Outcome factors**

The right panel of Figure 1 shows the *outcome factors* of the conceptual model being presented here. From a services-management perspective, service outcomes—both positive and negative—are created in the customer's mind as experiences, and retained there as memories. Through such service experiences, customers recognise how much the firm values their patronage and loyalty. The literature clearly indicates that positive word of mouth, customer loyalty, and a positive image lead to improved market and financial performance.

The term 'word-of mouth' (WOM) is used to describe communication between persons regarding a product or service whereby positive or negative experiences affect the future buying behaviour of actual or potential consumers (Ennew et al., 2000). WOM communication plays a significant role in consumer attitudes and buying behaviour; moreover, satisfied customers become loyal customers and engage in positive WOM communication (Anderson & Sullivan, 1993; Reichheld & Sasser, 1990; Brown & Reingen, 1987; Buttle, 1998).

WOM marketing is cost-efficient (or free). In addition, WOM is credible to consumers because the sender of the information usually has nothing to gain from the recipient's subsequent decision to buy or not buy (Bansal & Voyer, 2000). Customers believe what they hear from the public. It has been suggested that customers trust their friends and families, as well as other customers, more than they trust companies and their slogans and advertisements (Katz and Lazarfeld 1955; David 1979). WOM is especially significant in service industries because a service outcome is intangible and cannot be assessed before consumption. Parasuraman et al. (1988) found a significant positive relationship between customers' perceptions of service quality and their subsequent willingness to recommend the company to others, and Ranaweera and Prabhu (2003) found that higher levels of customer satisfaction were associated with higher levels of positive WOM and customer retention.

A firm's ultimate goal of securing a good return on investment is primarily dependent on a loyal customer base. The competitive markets of today provide customers with greater choice than ever before. As a result, attracting, satisfying, and retaining customers have therefore become essential if firms are to be successful. As Drucker (1973, p. 79) once observed: "... to satisfy the customer is the mission and purpose of every business".

Research by Reicheld and Sasser (1990) demonstrated that a 5% increase in customer retention results in a 25–85% increase in average customer lifetime value—thus producing a significant exponential boost to corporate profitability. They also found that up to 60% of increased sales to new customers can be attributed to customer recommendations—an indicator of customer loyalty. Furthermore, a study conducted by Heskett et al. (1994) showed that, in some companies, loyal customers not only provide the profits but also cover the losses incurred in dealing with less loyal customers.

Image is important for any organisation because it influences customers' perceptions of the goods and services being offered, and thus affects their buying behaviour (Zeithaml & Bitner, 1996). Researchers have identified a number of factors that determine image. Normann (1991) argued that image is built up in the customer's mind through the combined

effects of advertising, public relations, physical image, WOM, and the customer's actual experiences with the goods and services. Of these, Normann (1991) deemed the customer's experience with the products and services to be the most important factor in the development of image. Similarly, Grönroos (1983) suggested that image is formed by the customer's perception of the quality of service and customer satisfaction.

Kandampully and Suhartanto (2003) found that a firm's ability to establish a favourable image contributes significantly to customer loyalty. Indeed, positive WOM, loyalty, and image are interrelated. Customers who receive superior service experience will provide positive WOM to enhance the firm's image in the market and will be inclined to use the firm in the future as loyal customers.

### **Conclusions and managerial implications**

The importance of a service orientation as a strategic initiative that should be continuously informed by: (i) external (market) factors; (ii) internal (strategic vision and service vision) factors; and (iii) customer-outcome (image, loyalty, and WOM) factors (see Figure 1). The conclusions of the study can be summarised as follows.

First, it is essential that service firms do not lose sight of the crucial external factors—customers, the marketplace, and the competition—and the importance of a committed and empowered workforce in attending to these factors. Many leading service companies (such as Marriott) continually demonstrate the importance of providing customised service and enhancing customer contact at every opportunity. Similarly, Southwest Airlines has built a culture of committed employees through its innovative profit-sharing program and its attention to internal service quality—thus satisfying its external customers and building long-term relationships with them. Committed and empowered employees are essential in attending to customers and the marketplace. However, when firms become successful, it becomes increasingly difficult to engender a customer focus in the workforce. This, it is suggested can be overcome if firms build a customer-focused culture as part of its basic strategic orientation.

Secondly, using the conceptual model shown in Figure 1, the present study suggests that firms should take full advantage of customer information to ascertain (and continuously adjust) the relevant dimensions of service orientation. Subtle alterations in the dimensions of service orientation will occur as the needs and demands of customers change. To keep themselves aligned with the current dimensions relevant to service orientation, firms should frequently revise: (i) service dimensions; (ii) the measuring instruments used to gauge service climate; and (iii) reward-and-recognition programs.

Thirdly, service firms should frequently measure their service orientation in terms of service excellence. Researching the views of employees can help managers to identify, measure, and manage the relevant intra-organisational drivers required to enhance customer satisfaction. Managers should continuously ask themselves what they can change in their organisation—such as internal structures, staffing arrangements, service processes, reward systems, and the like—that will have a positive effect on the quality of service that customers will receive.

Fourthly, managers and supervisors should understand that a service orientation does not exist unless it is perceived by the workforce through the attitudes and actions of management. Managers must ensure that their own actions do not contradict the firm's general orientation to serve customers. This point is particularly salient in service businesses where face-to-face service encounters take place regularly. The perceptions by front line employees as to the extent to which the firms leaders practice service excellence have the most influence on the quality of the interactions with customers.

Finally, the study recommends the application of the conceptual model presented here in Figure 1. The model can be a useful visual aid when service organisations are contemplating the implementation of a service orientation in their firm in a quest for competitive advantage. The model outlines the more important antecedents of a service orientation and illustrates that a service orientation first requires attention to external factors before creating a vision that incorporates service delivery as a predominate part of the firm offering.

A number of issues have emerged from these studies which have important contributions in both management theory and practice. While the above arguments proffer conceptual understanding of a service orientated business strategy, the authors recommend empirical research, across a range of service industry sectors, to complement the study and to explore the relationships between each of the elements of the proposed model.

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## Generation Y's Ethical Positioning: Are They Ethical Decision-Makers?

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### Abstract

The need for ethical decision-making in the professional hospitality setting is a necessity. However, ethics in hospitality education is not as decisive regarding teaching methodology. The question is not should we teach ethics, but rather how do we teach it effectively. This research discusses the ethical "position" of current Gen Y undergraduates to determine how effective ethics education can be achieved. The results indicate that Gen Y university undergraduates do internalize, do utilize traditional moral absolutes, but ethical decision-making climates are multi-dimensional and multi-determined.

### Introduction

As a result of the myriad of corporate collapses in the United State, and other areas of the world, aspects of ethical behavior have attracted increased scrutiny in the hospitality academic literature. While many failed organizations had traditional management controls such as formal approval procedures, reconciliations, and audit requirements embedded in their corporate structures, their lack of "soft controls" such as management philosophy, ethics and integrity were often missing. Hubbard, (2002) further suggests that organizations pay closer attention to their corporate or organizational culture which is often a critical factor in reaching business goals, although an intangible, difficult to verify and measure. McShane and Travaglione (2003) define organizational culture as "The basic pattern of shared assumptions, values, and beliefs governing the way employees within organizations think about and act on problems and opportunities". Pertinent to hospitality education, these organizational building blocks of shared values are the values of individuals within the organization. While culture evolves over time within the organization, it is continually modified by influences external to the organization, in the form of values introduced by new members. These values are influenced, *inter alia*, by the views of family, friends, educators and the mass media. It is also possible that more fundamental factors, such as gender and age are important determinants of value and behavioral traits.

Workplace attitudes are also changing as workplace diversity, generational differences and cultural differences make the workplace more complex. Behaving with integrity in the organizational setting consequently requires an individual to do more than simply operate in line with legal and professional standards. Consequently, the importance of understanding the ethical beliefs of students currently engaged in the hospitality education setting, soon entering current organizational cultures, will continue to heighten.

### Literature Review

As posited by Parashar, Dhar, and Dhar (2004), values are principles for action encompassing abstract goals in life and modes of conduct that an individual prefers across different situations. Certain variables are valued because they are fundamental characteristics or needs to make a better society and facilitate to differentiate between what is desired, electable, short term and long term, and good. The lifelong behavioral pattern, attitude and perception of individuals are guided and directed by these values. They are most often reinforced by society, since sources of values are national culture, family teachers, friends, and other environmental factors.

Ethics defined is an inquiry into the nature and grounds of morality where the term morality is taken to mean moral judgments, standards and rules of conduct (Hunt & Vitell, 1988). Ethical theories in moral philosophy may be categorized as either deontological or teleological theories. Deontological theories deal mainly with the inherent righteousness of a behavior. Teleological theories stress the amount of good or bad embodied in the consequences of the behaviors (Hunt & Vitell, 1988). The deontology school of thought focuses on the preservation of individual rights and on the intentions associated with a particular behavior rather than on consequences (Ferrel & Fraedrich, 1991).

Deontological views include the Golden Rule “Act in the way you would expect others to act toward you” and also Kant’s categorical imperative, “Act in such a way that the action taken under the circumstances could be a universal law or rule of behavior.” (Laczniak, 1983). Ferrell and Fraedrich (1991) argue that deontologists look for conformity to moral principles to determine whether an action is ethical or not. Standards to defend personal ethics are often developed from types of deontological philosophies (Carting & Strong, 1995). Ferrell and Fraedrich (1991) cite the deontologist’s position that individuals have certain undeniable rights which include: freedom of conscience, freedom of consent, freedom of privacy, freedom of speech and due process.

From a different perspective, teleology focuses on the consequences of the actions or behaviors of the individual (Singhapakdi & Vitell, 1991). Moral philosophers often look at teleology as consequentialism because they assess the moral worth of a behavior by looking at its consequences. To define teleology in the business sense, egoism is used. Egoists believe they should make decisions that maximize their own self-interest which is defined differently by each individual (Ferrell and Fraedrich, 1991). Ferrell and Fraedrich further defined self-interest to each individual egoist in numerous ways: one may want pleasure, wealth, power, fame, a good physical well-being, or other personal considerations. Existing weaknesses of ethical egoism prevent one from taking a stand against even blatant business practices or resolving conflicts of egoistic interests among two individuals. Utilitarianism asserts that an ethical act should always produce the greatest ratio of good to evil for everyone. Jackson and Artola (1997) further cited that an act will be considered ethical if it produces a greater balance of good over evil in any given situation; the question then lies with whose good is it trying to promote. This theory then follows that of egoism because most likely one is going to promote the good of the individual.

While the majority of studies that identified gender differences in ethical attitudes have found women to be more ethical than men, a study by Peterson, Rhoads, and Vaught, (2001) found the reverse to be true. In contrast with the numerous studies reporting gender differences in ethical attitudes, a number of other studies (Cortese, 1989; Kidwell, Stevens & Bethke, 1987; and Sikula & Costa, 1994) found no significant differences attributable to gender. Dawson (1992) points to a possible reason for the disparity in these studies, suggesting that there are gender differences where interpersonal relationships are involved, but no differences when the situations are non-relational.

Peterson et al. (2001) also found that age was a significant predictor of ethical behavior. They cited that older people possess higher ethical beliefs, and are less likely to be influenced by people around them at work and at home. Other studies, however, such as Cortese (1989) found that age was not significant. Both Dawson (1997) and Peterson et al. (2001) also reported an interaction between age and gender. Their findings suggest that ethical attitudes develop at different rates for each gender, with the differences diminishing as age increases. It appears likely that the values acquired in the home through gender socialization during childhood (Gilligan, 1982), and through moral development in general (Kohlberg, 1969) will influence attitudes to ethical issues (Peterson et al., 2001). Finally, the shared values acquired from organizational life, through company codes of ethics (Kohut & Corriher, 1994), socialization and management example, are also likely to influence attitudes to ethical issues (Perryer & Jordan, 2002).

Perryer and Jordan (2002) maintain that one of the major problems with previous research is the lack of a generally accepted instrument for measuring ethical constructs. Further, the inconsistency of literature findings point to the need for further research to examine different combinations of variables and isolates the variance attributable to individual variables. Finally, research involving samples from different cultures will also provide a better understanding of the significance of culture on ethical behavior, as well as a relational perspective.

Parsa and Lankford (1998) argued that as economic boundaries become more global in scope, traditional Western ethical thought may lead to clashes among Western organizations and companies from differing cultural settings. Carting and Strong (1995) posited that such clashes could lead to alienation of foreign customers, firms and governments and resultant competitive disadvantage or to an abandonment of ethical considerations altogether in the struggle to compete internationally.

### **Significance of the Study**

The literature indicates that ethics instruction benefits undergraduate students. However, the same existing research further cites that post-graduates use less ethical consideration regarding decision-making (Beggio & Lane, 1989; Glenn, 1992). Hence the existing research has thus far failed to provide direction regarding the ethical “position” of current undergraduate hospitality students which we argue is crucial to the proper and effective framing of the following three questions: (1) From what perspective should ethical principles and philosophies be approached at the undergraduate level? (2) Should ethical principles and philosophies be presented and discussed, instilled, or compared and contrasted? (3) Do Gen Y undergraduates internalize and rely in their own personal value system, or do they adhere to traditional moral

absolutes? Without answers to these questions, i.e. understanding the ethical mechanism of Gen Y undergraduates, much of the time and effort spent in class exposing these students to ethics may be wasted due to the disconnect between student and instructor reference framing.

The hospitality industry, from student educational endeavors to acculturation into the operational setting, requires ethical decision-making conducted in alignment with organizational cultures, oriented either firmly or with mixed signals, to positive ethical philosophies. Most hospitality departments integrate ethics into nearly every course rather than develop separate courses devoted entirely to ethics philosophy. Since there is little consensus in the existing literature concerning specific ethical behavior of undergraduate students, the purpose of this study is to address undergraduate ethics from the broader (deontological and teleological) perspective to address what the authors feel is a key initial unanswered question: What is the ethical position of current Generation Y undergraduate students? The authors acknowledge that ethics are generally perceived to be individualistic; however, as a generation with certain consistent beliefs and traits, we argue that some predictable consistency of choice between traditional moral philosophies and personal ethical views exists. Thus hypothesis one is derived.

H 1: Current Generation Y undergraduates will integrate traditional moral philosophies and personal views of acceptable ethical behavior for ethical decision-making.

Ethics is the theoretical perspective provided by a larger theory of social justice (Lippke, 1995). Further, Kohlberg (1969) indicated that there were three developmental levels of moral theory and philosophy. From lower order to higher order of moral development, these three levels are egoism, group-oriented values, and fairness-as-virtue. Kohlberg (1969) believed that ethics can be taught in accordance with these three developmental stages (Folger, 1998). Ethics, as a general concept, ranges from broad topics such as the meaning of ethics or the role of ethics in business activity to narrow issues as individual ethical dilemmas confronted by managers in the specific industries (Stiles, 1997). Cook, Hunsaker, and Coffey (1997) cited "ethical" criteria as a direct reflection in defining "decision-making" criteria. Moreover, they believed that decision-making criteria should conform to laws, human rights, and social responsibilities. This view consistently echoes throughout the reviewed literature. Regardless of the sample type used, the majority of the studies reveal the same results regarding education level and ethics. The overall analysis indicates that ethical values become less apparent in subjects at the post-graduate level of education in most cases. However, these results include varying degrees of difference according to the situation presented to the subjects (Merritt, 1991; Lane, Schaupp, & Parsons, 1989); Glenn, 1992; Wynd & Mager, 1989; Burton, Johnson & Wilton, 1991; and Jones, 1990). In light of these findings, it would seem plausible that little variance should exist prior to post-graduate education. Empirical findings are inconsistent regarding specific factors such as age, gender, and culture that influence ethical behavior. Therefore much conjecture as to the validity and necessity for ethics education at the undergraduate level still endures. Thus, hypothesis 2-1 and 2-2 were derived:

*H 2-1: There is no significant difference in ethical position between undergraduate educational levels.*

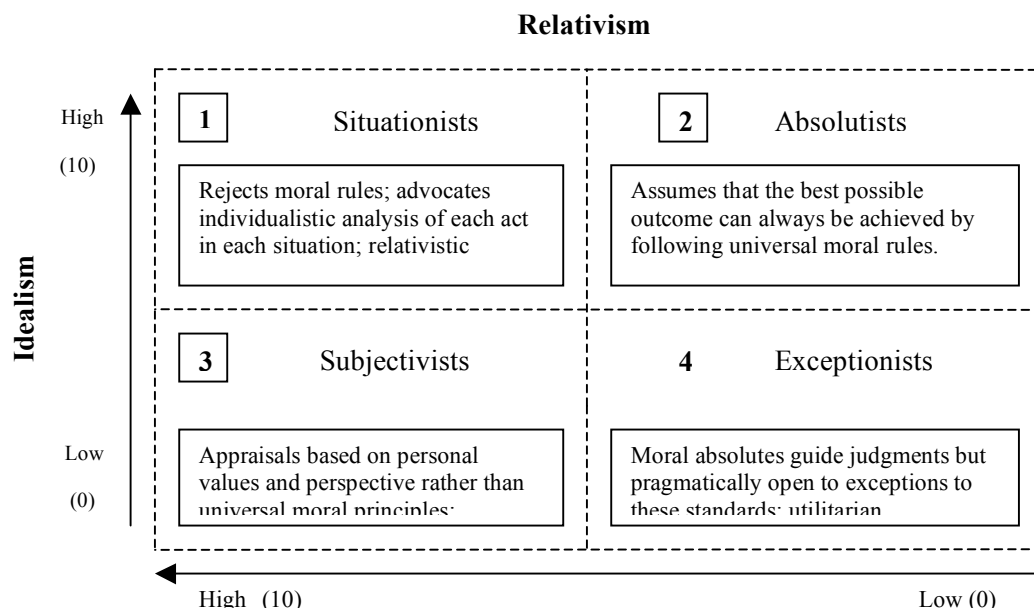
*H 2-2: Gender will have no significant bearing on ethical positioning at the undergraduate educational level.*

## **Methodology**

The respondent's ethical philosophy was measured by Forsyth's (1980) two-dimensional (idealism-relativism) Ethics Position Questionnaire (EPQ). The EPQ consists of two scales-ten items to measure idealism and ten items to measure relativism. The respondents were asked to indicate their extent of agreement or disagreement with each of the 20 items by using a ten-point, Likert-type anchored scale (1 = disagree, 10 = agree). The idealism and relativism scores for all respondents were measured as the sum of scores on the ten items measuring idealism and relativism, respectively. The questionnaire used in this study was based on one used in previous studies by Ziegenfuss, Singhapakdi, and Martinson (1994) and Ziegenfuss and Singhapakdi (1994). All questionnaire items were consistent with those used by Ziegenfuss et al., and Ziegenfuss and Singhapakdi to reflect the most reliable measures available. Therefore no questionnaire items were modified. Student respondents were involved in normal hospitality curriculum course work unrelated to hospitality ethics to control scoring validity and bias. As per university guidelines, participation was both voluntary and anonymous, and the instructor of record was not involved. The classes were randomly selected from available classes by undergraduate classification. The manipulation for this study was whether the students overall response was high or low relative to idealism and relativism. The study's analysis included descriptive statistics, and inferential measures including chi-square, bivariate analysis, and ANOVA to test the moderating effects utilizing SPSS (version 13) to perform the statistical calculations.

Figure: 1

Forsyth's Taxonomy of ethical ideologies



Source: Forsyth, 1980, p.176

A high idealism score indicates that the respondent tends to favor “moral absolutes” when making moral judgments while a high relativism score indicates that the respondent tends to rely less on universal ethical rules when making moral judgments. Following Forsyth’s methodology, the respondents were further classified into one of four “Personal Ethical Philosophy (PEP) categories depending on their relative levels of “idealism and relativism. Situationists are respondents with high idealism and high relativism (assigned a PEP code of 1) who reject moral rules and advocate individualistic analysis of each act in each situation. Absolutists are respondents with high “idealism” but low “relativism” (assigned a PEP code of 2) who assume that the best possible outcome can always be achieved by following universal moral rules. Subjectivists are respondents with low “idealism” but high “relativism” (assigned a PEP code of 3) who base appraisals on personal values rather than universal moral principles. Finally, Exceptionists with low “idealism” and low “relativism” (assigned a PEP value of 4) whose moral absolutes guide judgments but who are pragmatically open to exceptions to these standards.

## Results

### *Profile of the Respondents*

The sample consisted of 86 hospitality undergraduate students (n=86) with the average respondent’s age being 21.5 years (range 20 to 23). The survey population, and university undergraduate status, consisted of 22 freshmen (first year), 26 sophomores (second year), 14 juniors (third year), and 24 seniors (fourth year). This sample population was comprised of 39 male and 47 female undergraduates representing 31% of the overall hospitality student population.

Although bivariate analysis and non-parametric statistical calculations resulted in significant statistical relationships, these quantitative relationships were partial contributors to the answers sought by the research questions. Thus the descriptive statistics in conjunction with qualitative analysis of the questionnaire scores and participant relationships provided the highest clarity of the study’s results.

### *Undergraduate educational levels*

Analysis of the data indicated no significant differences from one undergraduate level to another. Responses were consistent for all age level classifications thus generally reflecting the undergraduate view of the existing literature, and supporting hypothesis 2-1 which indicated that differences in undergraduate educational levels would not contribute to subsequent ethical differences among undergraduates.

### *Gender*

Quantitative analysis indicated no practical significant difference in respondent responses regarding gender which would appear to support hypothesis 2-2 positing that gender would have no significant bearing on undergraduate ethical positioning. However, a review of the descriptive response frequency for males and females indicates a distinctive difference in the scoring distributions in three specific moral judgments addressed in the questionnaire. The overall female response to the statement: "Risks to another should never be tolerated, irrespective of how small the risks might be." resulted in a scoring distribution noticeably higher than their male counterparts. Further: "The existence of potential harm to others is always wrong, irrespective of the benefits to be gained." received a more positive female response distribution. Finally, "The dignity and welfare of people should be the most important concern of any society." indicated greater female concern for these issues. The overall female response to other statements dealing with harm or risk to others, the importance of personal dignity, and the welfare of others resulted in consistent agreement to a greater degree than male responses. The male response to "Moral standards are simply personal rules which indicate how a person should behave and are not to be applied in making judgments of others." appears to confirm greater female sensitivity to certain moral constructs. Therefore, although the findings fail to indicate the existence of any practically-significant differences, we are compelled to reject hypothesis 2-2 because descriptive scrutiny and qualitative evaluation fail to conclusively confirm the quantitative findings.

### *Idealism and relativism*

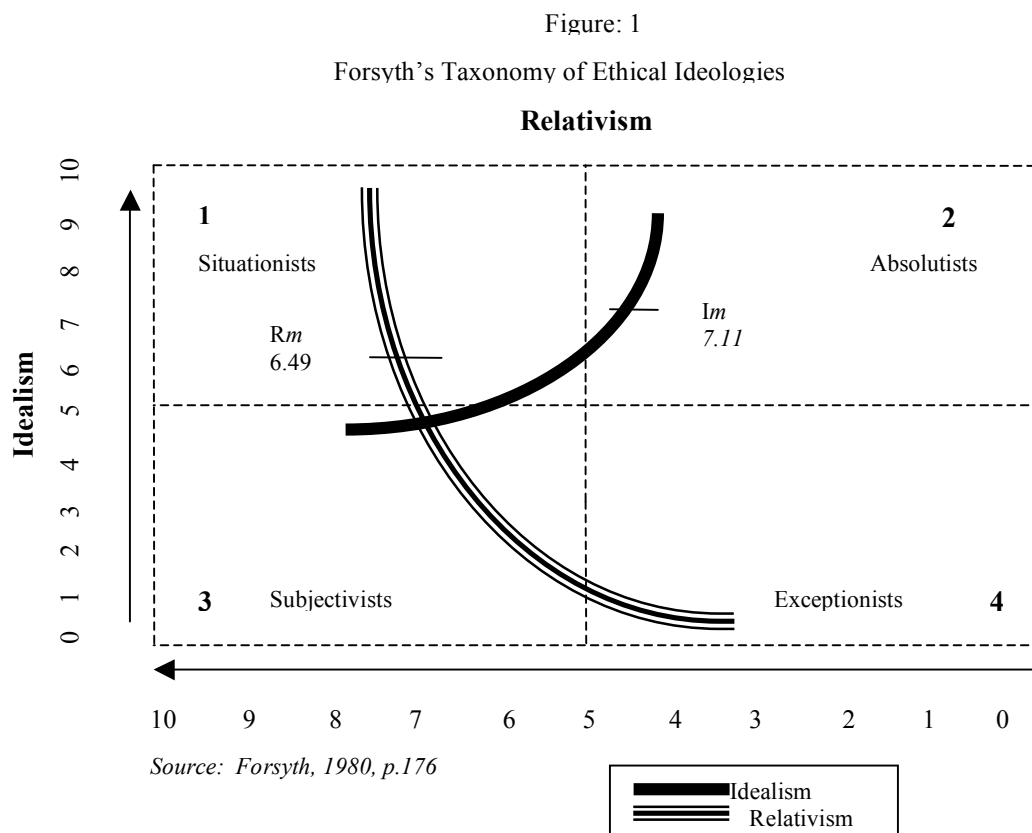
The overall findings related to these two constructs (Figure: 1) indicate that undergraduates do invoke traditional moral philosophies ( $m = 7.11$ ) in decision-making. However, Gen Y undergraduates also embrace relativism ( $m = 6.49$ ) to a certain degree. However, the study's findings indicate no clearly dominant Gen Y ethical ideology made evident by the overall idealism standard deviation of 2.36, and a relativism overall standard deviation of 3.21 in response to the range of respondent level of agreement selections (range = 1 to 10).

Hence, the findings indicate that Gen Y undergraduates subscribe to a myriad of ethical ideology combinations for decision-making. Respondent responses indicate a preference, to some extent, for traditional ethical philosophies while relativism scores also show a preference for undergraduates to internalize making the personal values component an important part of the decision-making process. Thus the findings suggest that decision-making varies along a spectrum that includes the rejection of moral rules by some undergraduates who favor individualistic analysis of each act in each situation, while others depend on moral absolutes to produce the best possible outcomes in all situations. Further, some undergraduates refer to moral absolutes but remain pragmatically open to exceptions when confronting decision-making situations requiring an ethical perspective. Therefore, hypothesis 1 was confirmed.

Finally, the findings of the study suggest that Gen Y undergraduates appear to have an "options open" approach to ethical decision-making as evidenced by the lowest undergraduate response mean of 5.59 to the questionnaire item: "No rules concerning lying can be formulated; whether a lie is permissible or not permissible totally depends upon the situation." The overall Gen Y response distribution includes those who "disagree" and feel the need for some underlying moral mechanism. However, the predominant respondent selections ranged from "some agreement" to "complete agreement" with this item.

### **Discussion**

These are the initial results of a larger study currently in progress and, as such, our broad generalization of the data is exclusively based on the results of this portion of the larger multinational and international extension to best address our ethical questions, and to explore international differences as we may find to exist. Technology and global economy considerations have made the world smaller in addition to multicultural, generational, and global ethics implications which continue to increase the significance of ethical decision-making on both personal and organizational levels. We posit that an organization is formed on the basis of a generally accepted body of knowledge, widely recognized standard of attainment,



and an enforceable code of ethics. Students invariably ask: “If organizations do not operate ethically, then how can an ethical person possibly succeed? It is important for undergraduates to understand that the real question is: “How does one measure success?” and the long term implications of how we address decision-making.

The major implication of this study is that the Gen Y undergraduate ethical climates are multi-dimensional, and of greater importance - multi-determined. There appears to be no predominant reliance on moral absolutes, although traditional moral philosophy is integral to the undergraduate decision-making process. Gen Y undergraduates do internalize and the findings indicate a reliance on personal value mechanisms which can be moderated by family, society, education, and other internal and external influences that shape their value perceptions.

The study found no statistically significant differences in the personal ethical philosophy of undergraduates at varying educational levels. The implication from this finding is that undergraduate experiences that integrate ethics throughout a curriculum have little or no effect on a student's personal ethical philosophy. From one perspective, this corroborates the findings of other studies which found the ethical standards of post-graduates to be lower than undergraduates. From another perspective, this lack of effect is discouraging in light of the emphasis placed on ethics in the curricula of most hospitality programs.

The third implication of the study is the subtle differences which emerged regarding the female respondent's view of harm to others, concern for the welfare of others, and the unacceptability of risk which could be harmful to others. Our findings indicate that their male counterparts were less concerned about present or future human ramifications related to ethical decision-making. This study approached the research questions from the deontological and teleological (i.e. broad) perspective thus the data will not substantiate generalization relating to such specific differences.

In light of our findings, we feel that a simple presentation of traditional ethical absolutes would not breach the frame of reference disconnect of current Gen Y undergraduates. This, in our opinion, would do little to reshape personal values possibly formed prior to reaching undergraduate status, or address the students' inability to apply learned ethical values in a distributive fashion. We would prefer to use a “situational” or case study approach which would involve presenting moral absolutes and applying each absolute to a particular case study. Thus, students would arrive at differing

ethical solutions for every ethical dilemma presented – with varying solutions determined from the different ethical perspectives. In time, more critical thinking could be induced through student selection of the “best” ethical decision, the guiding moral absolute, and the reasoning for, and ramifications of, its selection. In this way, students learn an ethically methodical approach to decision-making.

We argue that lower ethical reference frames of postgraduates are not specifically related to a decrease in ethical standards but rather a reaction to differing organizational norms and pressures associated with professional competitiveness. At present, graduates process mixed ethical signals emanating from friends, family, education, and society. They process this information without the learned ability to discern: (1) the wisdom of traditional philosophy, (2) the balance achieved by combining personal values with moral absolutes, or (3) the consistency of application due, in part, to Gen Y’s propensity for situational decision-making without concurrent regard for ramifications which might lurk around the corner.

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## **Hospitality Entities in the Senior Living Industry: How Baby Boomers Influence Changes**

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### **Abstract**

The post World War II climate spawned the birth of the largest population boom in the history of the United States. Due to their increased diversity, level of education, and wealth, determining the services and amenities Baby Boomers will desire within retirement housing will take on increased importance. Hospitality corporations are attempting to compete in the senior living industry by extending their core competencies in operations, marketing, and customer service. This study uses both qualitative and quantitative means to determine the services and amenities Baby Boomers would desire in retirement accommodations.

Key Words: Baby Boomers, retirement facilities, assisted living, ccrc(s),

### **Introduction**

The aging of the Baby Boomers into the retirement population has compelled some in the hospitality industry to consider extending their brand structure to include senior living properties (Buglass, 1989; Thomas and Gale Research, 1999). Assisted living facilities and ccrc(s) have adopted a “hospitality” motif by patterning themselves after luxurious hotels/extended stay hotel properties and resort type properties (Cutler, 1996; Peck, 2001; Rauma, 2003; Raymond, 2000). The major difference between hospitality and senior living options lies in their missions: providing services for transient consumers (guests) consistent with extended stay hotels and resorts vs. non-transient consumers (residents).

Initially the Baby Boomers were viewed as “influencers” – persons with the power to sway the decisions of prospective residents (Tindell, 2002); now, however, they are the prospective populace. According to an American Association of Retired People (AARP) study (2005b), it was found that Baby Boomers would alter the current amenities and services of assisted living facilities by desiring 1) high-tech convenience appliances, 2) both indoor and outdoor health or adventure options, 3) the availability of entertainment options, 4) rooms designed as home offices, 5) a business center in the clubhouse, and 6) internet access. Competition, combined with the potential increase in quality demands of the future retirees (Baby Boomers) has put pressure on companies and facility designers to adapt to these changing preferences in order to be successful (Wright, 2004).

Assisted living facilities are largely consumer-driven (Kim, 2003) and vary greatly in price, quality, services, and amenities. State regulations, location, target market, and social climate also have an affect on the offerings of an assisted living property (Carder & Hernandez, 2004; Kleger, 2000; Sheryl, Philip, Eckert, Ann, & et al., 2005; Wright, 2004). In that the design of these assisted living facilities is influenced by both the current and the prospective populace, there is interest in identifying the level of quality, services, and amenities desired by the Baby boomer generation. Determining these will not be an easy task (Rauma, 2003). The purpose of this research was to identify Baby Boomer Generation preferences for retirement housing. The study examined their expectations regarding amenities, services, technology, and dining options currently available in assisted living facilities and ccrc(s). Some of the factors that are important for hotel companies considering extending their brand to senior living facilities are also considered.

### **Baby Boomers and the Assisted Living Industry**

The Baby Boomer cohort is characterized not only by its size, but its greater diversity, improved education, a longer life expectancy, and the increased role of women in the workplace (Taylor, 2004). This progression into senior citizenry has facility designers scrambling to determine the adjustments that are needed to satisfy a more sophisticated generation (Siebert, 2001). Baby Boomers tend to view retirement to be consistent with their current lifestyle (Asnes, 2004) and not a time when they will need assistance with the activities of daily living (ADL's) such as toileting, transferring, bathing, dressing, and eating (Metlife Mature Market Institute, 2003). Nor do they care to think of a time where needing assistance with money management, shopping, cooking, and cleaning - known as instrumental activities of daily living (IADL's) - will be necessary (Metlife Mature Market Institute, 2003). However, as Boomers age the likelihood that they will need assistance with these basic activities greatly increases (Freundlich, 1996; Sheryl, Philip, Eckert, Ann, & et al., 2005).

Baby Boomers initiated the development of the concept labeled assisted living facilities in the mid-1980s because nursing homes were not viewed as a suitable retirement living environment for their parents (Novelli, 2001; Raymond, 2000). The perceived higher quality of life associated with these facilities, along with the change in the economic status of the elderly population, facilitated a growth rate of 15% to 20% in the number of assisted living facilities in the mid-90's (American Health Consultants, 1998; Mollica, 1998). However, the strength and prevalence of competition in the assisted living segment has slowed the growth in recent years (Kleger, 2000; Wright, 2004).

The Department of Social Services (2002) has described ccr(s) by focusing on lodging, services, and regulations in the following way:

- 1) Lodging consists of apartments, duplexes, cottages or residential independent and group living units, a health care facility, activity center, and other amenities centralized in a main on-site building
- 2) Services include options for three meals, housekeeping, group meals facility, recreation areas, a variety of convenience shops, and local transportation, and
- 3) Facility is also often a licensed home for adults and licensed nursing facility

CCRCs and assisted living facilities share three core philosophies: 1) meeting both planned and spontaneous needs, 2) preserving resident's independence, autonomy, and dignity, and 3) providing a homelike environment as demanded by the Baby Boomers (Assisted Living Federation of America, 2005; Spillman, Korbin, & McGilliard, 2002; Wright, 2004).

### **Hospitality Companies and the Senior Living Industry**

Hospitality companies feel that consumers can associate the level and quality of services and amenities of the hospitality properties to their senior living properties (Boush & Loken, 1991; Kardes & Allen, 1991; Martin, Stewart, & Matta, 2005; Park, McCarthy, & Milberg, 1993; Rowe, 1996). These hospitality firms understood that they were entering the health-care industry when they began operating their first properties (Thomas and Gale Research, 1999); however, these hospitality companies did not fully anticipate the different regulations that accompanied operating in the senior living industry. Specifically, they did not foresee that the operating procedures of hospitality businesses were not fully applicable to the health care environment (Ferguson, 2002).

Much of the indecision of hospitality firms as a whole regarding entering the senior living industry lies in the difficulties adapting properties and property philosophies to that of the senior living industry, managing image consistency, and overcoming operational barriers. Given that many resources have been invested and expended to develop a position in the hotel industry, hospitality companies are reluctant to compromise their brand's image by extending into the senior living industry. Studies have shown that young markets such as the assisted living market (started in mid-80's) have high product failure rates and positioning uncertainty (Gort & Klepper, 1982; Sullivan, 1992) when trying to transfer products and services from a more established market. These facts make it very risky for a hospitality entity to enter the senior living industry. Rowe (1996) found that hospitality companies have encountered some problems in their attempts to convert hotels into assisted living facilities or continuing care retirement centers such as

1. A shortage of prime locations
  - Good locations for hotel properties are not the same as a good location for assisted living facilities or ccr(s). Assisted living facilities are designed to be in areas away from heavy traffic, surrounded by serenity, and accentuated by nature.
2. The cost of renovating these properties to meet company standards is higher than expected
  - Adding the necessary health care components to old hotel structures in order to convert hotel properties to assisted living facilities has been more costly than anticipated. The synergy or brand consistency after the transfer to the senior living facility has not been as easy to come by leading to potentially unfavorable opinions on the hotel corporation.
3. The core business skills that these hospitality entities possess do not directly transfer to the senior living environment

Marriott, Inc. has left the senior living market due to the costs associated with maintaining their quality of services and amenities in the senior living market on top of providing a level of health care consistent with their hotel property quality level.

## Methodology

A survey was developed to determine the overall expectations of the Baby Boomer generation as it relates to amenities, services, technology, and dining options in retirement accommodations. A small, convenient sample (n=20) was used as a pilot to determine the adequacy of the instrument. Preliminary analysis on the data led to a number of revisions. The revised survey included open-ended questions so as to allow the participants an opportunity to develop their responses.

In the first section the respondents were asked to indicate the importance of a number of options that relate to preference for retirement housing. For example, they were asked the importance of being in close proximity to shopping. In order to obtain the unguided opinions of the respondents, open-ended questions were selected. In particular the Baby Boomers were asked: 1) what comes to mind when they hear the term retirement facility; and 2) what should be added to the current offerings at retirement living communities. Lastly, the respondents were asked a number of demographic questions. Specifically, they were asked what year were you born considering the sample needed to be born between the years of 1946 and 1964. After a limited amount of additional testing, the survey was slightly revised and reformatted, then distributed to Baby Boomers at two large attractions in the county.

After receiving the data, the information was coded while maintaining data authenticity. In order to analyze qualitative data effectively, systemization and quantification of text must be performed (Taylor-Powell & Renner, 2003). Systemization is the analysis of text which eliminates biases in classification formation (Berelson, 1952; Holsti, 1969). Quantification is the process by which qualitative data are altered into a form amendable for statistical methods (Berelson, 1952; Holsti, 1969). CATPAC is a software package that organizes words by frequency, representative percentage of words based on total words responded, case frequency, and case percentage -- all based on the classifications after data smoothing (Woelfel, 1990). The software scans word sets and reports the frequency for each term while also giving the number and percentage of key terms. This is made possible by scanning data for grammatical spelling errors called data smoothing which allows proper categorization of key terms so that terms with the same meaning are not counted separately. CATPAC denotes a word and its plural form as different responses making data smoothing necessary. After standardizing the data, a list of up to 25 words were generated.

## Results

Four hundred and fifty surveys were distributed, and 97 were returned for a response rate of 21.5%. Of the 97 returned surveys 30 were not usable in that they were not from Baby Boomers; the usable response rate was 14.8%. By gender there were 53 females and 14 males.

### *Q1. What words come to mind when you hear the term retirement facility?*

There were 64 valid responses to this question. More than one response per respondent was offered meaning that there were actually more responses offered than persons responding. Given that there were 64 valid respondents and a wide variety of responses, Table 1 shows the terms representing 3.1 percent of the total responses.

Table 1

Frequency of Keywords from Analysis of Baby Boomer Data: What comes to mind when you hear the term retirement?

WORD	BOOMER COMMENTS	FREQUENCY	%
Elderly	"Old people," "seniors," "old,"	24	18.6
Community	"Social gathering," "social," "companionship"	14	10.9
Lonely	"Alone," "loneliness," "loss of spouse"	13	10.1
Smell	"Antiseptic," "smelly,"	7	5.4
Cost	"Expensive," "costly"	6	4.7
Peaceful	"Undisturbed," "peace"	6	4.7
Assistance	"Helpful," "dependent," "assistance"	5	3.9
Care	"Care," "medical"	5	3.9
Nurshome	"Nursing home"	5	3.9
Rules	"Restrictions," "limited," "controlled"	5	3.9
Appearance	"Building," "pretty," "structure," "clean"	4	3.1
Relax	"Relax," "relaxed"	4	3.1
Security	"Safety," "safe"	4	3.1

\*Note: Other words mentioned were activity (3), death (3), dementia (3), space (3), apartment (2), and boring (2)

The dominate portrait of retirement facilities based on the depictions of the Baby Boomer respondents is that of *elderly* persons in a *community* setting; yet somehow *isolated or lonely*. Within these settings, the respondents mention that services such as *security* as well as various types of *care* and *assistance* come to mind. Other aspects of the retirement

facility the respondents mention are *peacefulness* and a *relaxed* environment. The actual words associated with peaceful were “undisturbed” and “peace” which suggests that they envision a time where responsibilities are greatly reduced. Appearance was another aspect evoked by respondents when hearing the term retirement facility. Other reported terms seem to imply a *negative stigma* relating to retirement facilities. These terms depict an environment consistent with that of a nursing home based on the antiseptic *smell* and the idea of infringing upon freedom (*restrictions*). Respondents also see retirement facilities as having high *costs*.

*Q2. What do you feel needs to be included at a retirement facility that is not presently provided?*

There were 45 responses to this question, with three responding “I don’t know.” Respondents had the option of providing more than one answer to this question. For analysis of this question 3.1% or more valid responses were considered appropriate for discussion. The results of this analysis are shown in Table 2.

Table 2.  
Frequency of Keywords from Analysis of Baby Boomer Data: Additions to Retirement Facilities

WORD	CONSUMER COMMENTS	FREQUENCY	%
STAFF	“Cheerful staff,” “enough staff,” “more staff,” “trained staff,” “smiles”	12	16.9
ACTIVITY	“Evening activities,” “outside activities,” “community volunteer activities”	9	12.7
APPEARANCE	“Cleanliness,” “cleaner facilities,” “décor”	4	5.6
THEATER	“Theater/auditorium,” “movie theater”	4	5.6
FITNESS	“Fitness,” “work out facility”	3	4.2
FOODQUAL	“Gourmet Food,” “Fresh food,” “better food”	3	4.2
GOLF	“Golf,” “Golf carts”	3	4.2
IDK	“I don’t know,” “don’t know,” “don’t know current offerings”	3	4.2
INTERGEN	“Variety of ages,” “interaction with younger people,” “ability to mentor”	3	4.2
MASSAGE	“Massage therapy”	3	4.2
SOCIAL	“Social gathering rooms,” “gathering rooms,” “company”	3	4.2
FITNESS	“Fitness,” “work out facility”	3	4.2

\*Note: Other words mentioned were food variety (2), alcoholic beverages (2), financial assistance (2), covered parking (2), cost (2), pets (2), and transportation (2)

When asked what needs to be included in a retirement facility that is not presently provided, the facility staff was the area of most concern. Suggestions mentioned by the respondents regarding staff were “well-trained staff,” “cheerful staff,” and “enough staff.” Improved staff-resident interaction would improve the quality of the resident’s stay and help to remove some of the negative stigma of retirement facilities. Cleanliness was also seen as a much needed aspect relating to the *appearance* of retirement facilities. This may suggest that retirement facilities are viewed in a negative manner. *Activities* that promote *social interaction* and *intergenerational interaction* were pinpointed as being good additions to the retirement community environment. The “ability to mentor” and interact with a “variety of ages” were mentioned as important to the future retirees. Golf carts that assist with transportation around the property along with fitness rooms or work out facilities and massages were mentioned as necessary additions to retirement facilities. Food quality was also mentioned as an area for improvement.

*Important Aspects of Retirement Housing*

Using a five point, likert-type scale, the participants were asked to rate the importance of a number of options or preferences that might influence the selection of a retirement facility. For example, the respondents were asked to rate the importance of “*access to public transportation*.” The preferences/options were organized into 8 constructs, and an average score calculated for each. The constructs were: LOCATION, APARTMENT, COST, SERVICES, FOOD, RECREATION, SOCIAL, and MISCELLANEOUS. In addition a total score was calculated for each respondent by summing all of the responses. Subsequently, multiple regression was used to gauge the importance of the constructs in the selection of retirement housing.

The amount of variance explained by the model was 99.8%,  $F_{(8,58)} = 4,179$ . In addition, the parameters associated with the constructs were significant. Based on the size of the standardized regression coefficients, LOCATION was the most important factor when choosing a retirement facility. Table 3 shows the standardized beta weights for the constructs used in this analysis. Holding all things constant, the “APARTMENT” was the second biggest influence. For this sample COSTS were relatively unimportant.

## Discussion and Conclusions

The Baby Boomers surveyed are still not fully aware of the different types of retirement options available – nor are they able to disassociate the negative stigma that is attached to retirement facilities. They still associate retirement facilities with the idea of loss whether it is a loss of physical ability, cognitive awareness, friendship, or freedom. While they are

Table 3  
Standardized Beta Weights for Constructs that affect the selection of Retirement Housing

Construct	Unstandardized Coefficients		Standardized Coefficients	T	Prob >  T
	Beta	Std. Error	Beta		
LOCATION	11.220	.219	.343	51.222	.000
APARTMENT	5.987	.200	.213	29.941	.000
SOCIAL	4.874	.166	.201	29.327	.000
MISC	4.755	.192	.192	24.756	.000
RECREATION	3.935	.128	.176	30.653	.000
SERVICES	4.121	.187	.160	22.083	.000
FOOD	5.061	.217	.152	23.319	.000
COSTS	3.140	.151	.140	20.740	.000

\*Note: Constructs are ranked by standardized coefficient.

aware of the major services provided at retirement facilities, they are not as aware of the increased quality of services and amenities provided at assisted living facilities. There are roughly seven major categories of considerations for the Baby Boomer generation when deciding upon which retirement facility to reside: services, food, costs, apartment/room, recreation, social atmosphere, and location.

From the quantitative analysis, a few conclusions can be suggested. Location, the components of the apartment room, food, and social gathering places have been suggested to be the most important factors in deciding upon a retirement facility. These aspects are also focused on providing a homelike environment within a community and were previously mentioned as components of upholding the assisted living philosophy. SERVICES, RECREATION, and COSTS were seen as the least significant determinants of retirement facilities; however, these results are quite different than that of descriptive analysis. Descriptive analysis shows that SERVICES is the most important aspect in choosing a retirement facility. These services were in reference to the reasons a person would move into a retirement facility such as assistance with health/physical limitations, companionship and/or assistance in the absence of a spouse or caregiver, safety, and social interaction. Combined these were seen as the most important aspects in choosing a retirement facility given the means for the construct values. SERVICES (4.2761) were followed by FOOD (4.1522), COSTS (4.1093), APARTMENT ROOM (3.8212), MISCELLANEOUS (3.5582), RECREATION (3.4776), SOCIAL (3.4627), and LOCATION (3.2673); however, the difference in these means did not prove to be statistically significant.

Hospitality entities looking to enter the senior living industry need not look further than their own extended stay hotel models when designing their assisted living facilities. In order for hospitality entities to convert extended stay hotels into assisted living facilities, there are four major areas where adjustments would need to be made: 1) alter some of the amenities from serving temporary guests to permanent residents, 2) create a community environment versus a pleasant stay environment, 3) increase the number of staff members to encompass the increased level of services, and 4) outsource the health care aspect of the property. For instance, extended stay properties must increase the number and the size of rooms within the apartment, remove the standard furniture and allow for persons to bring their own furniture (homelike environment), increase the size of bathrooms, install a washer and dryer, upgrade kitchen appliances, and add internet access in the rooms. They would also need to add some safety measures to the rooms that would assist elderly persons in moving around the room such as increased lighting, firmer carpeting, and support rails. Lastly, they would need to foster a community environment that includes social activities, community dining, and common areas where the residents would be able to interact with each other as well as persons of other age groups. Hospitality corporations wishing to enter the senior living industry, as well as those currently competing in this industry will continually need to check the pulse of their prospective populace in order to successfully compete.

## Limitations

The surveys were distributed along with a metered envelope leaving only one point of contact with the surveyed population. Dillman (2002) suggests five contacts with a respondent for an optimal response rate. The sample size restricted the degree to which the data could be analyzed. A larger and more diverse sample would also allow for analysis that would be more useful to hotel companies. The constructs created in the (regression) analysis are not independent; they

were selected based on a review of the literature. (Nevertheless, regression is a robust procedure, and the data were analyzed only to gauge the relative importance of the constructs as defined).

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## Professionalism in Hospitality and Tourism: Exploring the Perceptions of Employees

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### Abstract

Professionalism is a key concept in hospitality and tourism. Yet, there seems to be a paucity of research on this topic. The primary objectives of this research are to examine the antecedents and consequences of perceived professionalism from the hospitality operators' perspective, and to identify the components of professionalism that are applicable to the field. Analysis showed that four of five dimensions of professionalism identified from the extant literature also emerged in the hospitality industry. However, only *Sense of Calling to the Field* and *Job Autonomy* produced a significant effect on the self-perception of hotel managers and supervisors as professionals.

Key Words: professionalism, employees, hospitality and tourism

### Introduction

Hospitality and tourism is the world's largest industry and rivals any other in terms of size and economic impact. The future outlook and growth projections by industry analysts in this dominant sector of the service economy are strong. At the same time, the nature of the tourism industry is changing, as the business environment in which it competes becomes more volatile, dynamic, and increasingly hostile (Olsen, West and Tse, 1999). Hospitality operators are faced with many challenges and are being pulled into different directions. Globalization, consolidation, advances in communications technology, rising employee expectations, and changes in ownership structure are taking place on an unprecedented scale. Moreover, customers are becoming more sophisticated and demanding for quality services while not compromising on the price-value relationship.

Professionalism is a key concept in the hospitality and tourism field but unlike professionalism in medicine and law, there is paucity of research where professionalism in hospitality and tourism remain unclear (Hoffman, Kelly and Rotalsky, 1995). This is also a lack of study of the impact of professionalism on service quality in literature. There is a need to understand the components and structures of professional standards, i.e. industry wide professional recognitions. Gaps may exist in the implementation of professional practice. While there are ideas, assertions, and surveys on various aspects of professionalism in the hospitality field, this concept is not yet clearly defined. Since the concept of professionalism is so fundamental to hospitality and tourism, it becomes essential to examine the nature and components with empirical evidence. Thus, the primary objectives of this study research are: 1) to examine the antecedents and consequences of perceived professionalism from the hospitality operators' perspective, and 2) to identify the components of professionalism that are applicable in hospitality and tourism. The intention is to build up knowledge base to develop a theoretical framework and a measurement scale on professionalism. Previous studies on professionalism mostly stem from a sociological perspective, which may or may not apply across all professions. In this study we take the approach of examining how the industry looks at itself.

### Professionalism and Hospitality

The literature suggests that the concept of hospitality is closely associated with human interactions, the provision/consumption of certain types of products, and constitutes a type of exchange process designed to generate mutual benefits for the parties involved, or is a "harmonious" combination of all of these (Brotherton, 1999). Hospitality is not alone in the quest of being considered as a "profession". It is among one of the many occupations not traditionally associated with the title of profession (Crocker, Schrock, and Walker, 2001). What is the level of professionalism of hospitality and tourism managers? Like some professions such as nursing (Adams and Miller, 1996), professionalism in hospitality and tourism is a term freely used, but its definition and interpretation lack uniformity. There is no consensus among hospitality and tourism management about what behaviors comprise professionalism. For the hospitality and tourism profession, values can be generally categorized, as a sense of integrity, an ethical awareness, and the manner in which business is conducted.



Professionals are believed by others to render expert opinions, to be sound decision makers, and are viewed as leaders with expertise in specialized areas. Professions have an identity and certain coherence, they stipulate standards of professional conduct and practice, and are self-regulating (Brotherton, 1999). Professionals act morally and consequently have authority if and when they abide by the terms of their publicly made pledges (Koehn, 1994). On an international level, professionalism in hospitality and tourism is represented by the leaders of various hospitality and tourism organizations. Trade and professional associations are there to promote their members' trade or profession, for instance, American Hotel & Motel Association (AH&MA), Council on Hotel, Restaurant and Institutional Education (CHRIE) and National Restaurant Association (NRA). Among others, the associations known as Hospitality Financial and Technology Professionals (HFTP) and Hospitality Sales and Marketing Association International (HSMIAI) also actively promote the benefits of certification (Feiertag, 1999). A growing number of industry certifications in recent years is seen as an attempt on the hospitality industry's part to elevate the professionalism of both the recipient and the related industry by helping to set standards (Damitio and Schmidgall, 2001).

### **Components of a Profession**

Scholars have analyzed the concept of professionalism for decades and have determined the essential components from various viewpoints. Fournier (1999) suggested a framework "logic of professionalism" in which she included the society as one reference point, the organization as another and the individual a third as a framework for the creation of professionalism. The individual professional behavior, although highly depends on one's competence, ethics and control of acts, in many ways it is also a reflection of the organizational culture and social acceptance.

Abbott's influential work (1991) identified four distinct schools of thought: the functionalist view, the power view, the modified power view, and the continental view. Functionalist (Cullen, 1985) suggested that professionals have a prestige including high earnings, complex skills and higher education that deemed functionally important to society. Pavalko (1971) held that professionals stood out by possessing systematic theory and professional authority, governed by an ethical code, and cultivated by professional culture. The Power View, stemming from the functionalists view, added that professionals "protect" their status by requiring lengthy training of an occupation. Professionals focused on attributes that helped their professions to justify their status and privileges. While the Modified Power View, and the Continental View are somewhat stemming from the previous two schools, there are commonalities among these schools that serve as our choice of indicators for the study. Hall (1969, 1982) described five components that assess degree of professionalism among practitioners of various occupations. These included belief in public service, belief in self-regulation, a sense of autonomy in practice, commitment to the profession beyond that provided by economic incentives, and using the professional organization as a primary referent.

#### *Systematic body of knowledge*

The core elements of a profession are possession of a specialized body of knowledge and commitment to service. For the most part a professional's product is intangible, a service. Traditional professionalism came to apply to knowledge-based activities requiring long periods of education and training and entailing service for the common good (Cruess, Cruess and Johnston, 2000).

#### *Autonomy/empowerment:*

As a professional attitude, according to Snizek (1972), autonomy consists of the practitioner's desire to be free to make decisions about his work. These decisions should be made without the threat of external pressures. Burchell (1993) argued that professionalism acts as a mode of government of autonomous labour. The empowerment has always been emphasis in marketing literature.

#### *Ethics and professional conducts.*

There is an overlap definition of hospitality with ethics. Business ethics is rules, standards of good conduct in a given profession, codes or principles that provide guidelines for morally right behavior and truthfulness in specific situations. Ethics provide the foundation for employee pride and motivation (Hall, 1992), and provide a condition for customers' satisfaction.

#### *Commit to service/ Sense of Calling to the Field.*

A profession should be beneficial to the society at large. Professional commitment is to service for their fellow man as well as to maintaining and expanding the body of knowledge that is their expertise (Muncy, 1984). According to Hall (1968), sense of calling to the field is the professional devotion toward his work.

#### *Work commitment/commitment to profession.*

This construct composes of work commitment, intention to stay, career commitment and compensation issues. According to Carson (1999), employee commitment composes of work commitment, i.e. how a person value the importance of working; career commitment, the devotion and willingness to develop the career in a certain field, these elements will ultimately affect the employee's intention to stay in the current position or career.

#### *Establishment of association*

Using professional organization as a major referent. According to Hall (1982), professional organizations can be both formal and informal. Such associations reinforce the values, beliefs, and identity of the profession. By attending professional meetings, and by reading professional journals, practitioners develop what Gross (1958) terms "colleague consciousness." Once the practitioner acquires such consciousness, he is thought to be strongly influenced by the standards of his profession.

#### **Methodology**

In this study, we examine perceived professionalism in the hospitality and tourism industry in Hong Kong SAR, China. The data collection began with a comprehensive review of articles in magazines, newspapers, and academic journals were conducted. In addition, the web sites of professional associations serve the hospitality and tourism field were visited and attention was paid to information includes mission statements, code of ethics, and bill of rights. The information gathered was content analyzed for the structure and components of professionalism. This provides basis in developing questions for the pilot study.

#### *Professionalism Measurement Scales*

To develop the scales to measure professionalism, we contacted a sample of hospitality industry executives for their participation in the pilot study. The purpose of the pilot study is to ascertain what they consider to be the measures of professionalism. A semi-structured yet informal format was followed in the personal interview. A list of dimensions for measuring professionalism in the industry is developed as a result of the pilot study and a review of literature on the relevant topic. A number of them have achieved a degree of consensus in the literature (Crocker, Schrock, and Walker, 2001), while the others are considered to be unique features prevalent for the hospitality and tourism industry. Thus, the dimensions that are developed for this study are: Perceived Social Recognition/Image management, Perception of Supervisory Authority, Services Commitment and Service Standards, Compensation/Job Satisfaction, and Team spirit/Communications.

#### *Survey Instrument*

Primary data collection was conducted through structured survey instrument. A cover letter was sent to representative hospitality and tourism organizations and solicited for participation. For all the organizations that agreed to participate in the study, copies of survey for management, supervisors and front line employees were delivered to the organizations. For ease of understanding, the survey instruments were presented in both English and Chinese languages. The survey was divided into two parts: 1) professionalism related information, and 2) general information. Apart from the structured questions, several questions concerning the overall impression and evaluation are being asked with difference across three target groups: general staff (front line employees), supervisors and managers, as an overall measurement of professionalism. Demographical data such as age, gender, education background, functional background, duration of formal training, duration of servicing in industry and in current company were also asked. A seven-point Likert scale was used for all questions.

#### **Results**

A total of 19 hotels and one convention and exhibition center in Hong Kong agreed to participate in this study. These hotels ranged from deluxe to budget category, or five stars to three stars rating, as it is referred in Hong Kong, covering a wide geographic location from city hotels to suburban areas. A total of 665 surveys were delivered by hand to these organizations. Of these, 139 copies were sent to five-star hotels; 340 copies from four-star hotels; 117 copies from three-star hotels and 69 copies from the convention center.

A total of 636 completed questionnaires were obtained from the survey. The final sample consisted of slightly more males (55.6%) than females (44.45) and the majority of the respondents were high school graduates (59.4%) and between 21 and 35 years old (56.8%). About half of the respondents were general staff (46.4%) and the other half of the respondents were either at the manager (24.4%) or supervisor (29.2%) grade and the primary functional areas of the respondents included front desk/office (24.9%), food and beverage (29.0) and housekeeping (20.2%), among others. For more than half of the respondents, the tenure was 10 years or less for the industry (64.9%) and 6 years or less for the current property (60.8%).

### Statistical Analysis

The first part of the analysis was to identify the key dimensions of professionalism in the hotel industry. Instead of a split-half sample, of which the size would be too small for the purpose of the analysis, a sub-sample ( $n = 183$ ), drawn randomly from the original sample, was used in a series of principal component analysis that aimed to develop a parsimonious factor structure underlying the items. Ambiguous items were removed in the process based on three main criteria: a) all items included in the final model should load on one and only one factor; b) each factor should consist of at least 3 items; and c) items loading on the same factor should literally share a common meaning. After removing 13 of the original 26 items, principal component analysis with oblique rotation yielded a four-factor solution (using eigen value greater than 1 as cut off) that explained 61.12% of the variance of the 13 items.

In short, our analysis showed that four of five dimensions of professionalism identified from the extant literature also emerged in the hotel industry. However, only *Sense of Calling to the Field* and *Job Autonomy* produced a significant effect on the self-perception of hotel managers and supervisors as professionals. These results suggest that attracting those who have a genuine interest in the hotel industry and those who take pride to be a member of the industry, and giving these people considerable extent of discretion when performing their job functions are essential to raising the professional status of the industry. Moreover, the two dimensions that have no significant effect on self-perception (*Professional Organization* and *Belief in Public Service*) are concerned with one's perception of the hotel industry. These results show that the professional organizations and the perceived social recognition of the industry have little impact on the self-perception of hotel practitioners as professionals.

### Discussions/Implications

A number of recommendations can be drawn from the above results for individual hotels and the hotel industry as a whole to maintain and improve the level of professionalism in the industry.

- The information obtained from this study can aid management of the hospitality firms in formulating strategy (Olsen, West and Tse, 1999). Improving staff retention rate should be the focus of the industry because our results indicate that more mature, loyal and experienced employees tend to be those with higher levels of professionalism. Therefore, industry executives can create work atmospheres in which staff and line employees perceive opportunities to increase their professionalism and improve professional practice.
- Competency framework serves to translate the corporate values and objectives into codes of appropriate conduct. The turn to competencies marks a shift in the ways employees are evaluated, they relate not only to skills and task related behaviors but also to values, attitudes and motives. Like Fournier (1999) suggested, competencies operate through a combination of, on the one hand, standardization and codification of conduct, and on the other hand, automatization of conduct.
- The findings of this study confirm the importance of formal training to the level of professionalism. The development of college and on-the-job training programs in hotel and hospitality management should be one of the top priorities of the industry.
- Since there is a significant discrepancy in the level of professionalism exhibited by employees of different hotel classes and job ranks, due recognition should be given to the contribution of budget hotels and employees at the lower level of the organization hierarchy. They should be the primary target of any efforts to promote the level of professionalism in the industry.
- These results provided additional support for the four composite measures as key underlying dimensions of professionalism in the hotel industry. More importantly, these results suggested that professionalism could be addressed at two different levels – the industry level and the hotel level.

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## Exploring the Relationship between Destination Images and Visitors' Demographic and Travel Characteristics

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### Abstract

Measurement of destination image may be considered as a big challenge for destination marketers due to the nature of destination image's subjectivity. This study contends that there may never be such a thing called 'general' or 'overall' perceived image for a travel destination if it's not bound up with a specific type of tourists or market segment. Empirical evidence was provided by this study that, for a single destination, the image can vary from person to person with different demographic profiles and travel characteristics. Discussions and recommendations were made based on the finding of this study.

Key Words: destination image, demographic profiles, travel behavior

### Introduction

Destination image studies have become a staple of the tourism research agenda, but invariably they have been atheoretical and lacking in any conceptual framework (Fakeye and Crompton 1991, p. 10). Researchers have not been successful in completely conceptualizing and operationalizing destination image (Echtner and Ritchie 1991, p. 10). Despite its relevance to tourism marketing, research on destination image faces many difficulties. According to Gallarza et al. (2002), one difficulty is due to tourism product's characteristics such as complexity and multidimensionality. Another is that destination marketing involves the consumer physically moving to the behavior scenario. There is also great subjectivity in providing a tourism service. Moreover, the intangibility of tourism service hinders image assessment as it depends on invisible elements of pre-visit selection and a pre-taste of the destination (Fakeye and Crompton, 1991, cited in Gallarza et al., 2002). For instance, one thing that remains unclear and requires further test is to examine the nature of the relationship between tourists' perceptions of destinations and their demographic profiles, i.e. to see if there is a pattern of tourists' perceptions according to tourists' demographic profiles and travel status (i.e. pre-visit vs. post visit, travel with family vs. travel without family, etc.). This study uses a sample of international visitors visiting Oklahoma, to study the differences of their perceptions of Oklahoma's destination image based their profiles and travel characteristics.

### Literature Review

Crompton (1979) defined image as the sum of beliefs, impressions, ideas, and perceptions that people hold of objects, behavior, and events. Assael (1984) defined destination image as the total perception of the destination that is formed by processing information from various sources over time. According to Ditcher (1985), the concept of image can be applied to a political candidate, a product, or a country. It describes not individual traits, but the total impression an entity makes on the minds of others. Kinnear and Taylor (1987) defined image as an average of many separate attitudes toward a company, brand, or concept.

A comprehensive survey of the definitions provided in the major destination image measurement studies was conducted and presented by Echtner and Ritchie (1991) as illustrated in Table 1. According to Echtner and Ritchie (1991), although many researchers in the tourism field make frequent usage of the term "destination image," the definitions have been so variable that no consensus definition could be formulated.

Most of the definitions agree on one point, i.e. destination image is a sum of or total perceptions that visitors hold of a travel destination. In other words, destination image is composed of several components. In order to develop a complete knowledge of a destination image, all the components need to be identified and studied.

However, to identify all the aspects of destination image is not easy. One difficulty in identifying destination image is due to tourism product's characteristics such as complexity and multidimensionality. Another is that destination marketing involves the consumer physically moving to the behavior scenario (Gallarza et al. 2002). Moreover, there is also great subjectivity in providing a tourism service. The intangibility of tourism service hinders image assessment as it depends on invisible elements of pre-visit selection and a pre-taste of the destination (Fakeye and Crompton, 1991, cited in Gallarza et al., 2002).

Previous researchers observed that the number of visits or visitors' travel pattern (e.g. family travel of non-family travel) at a specific destination may have an impact on the image of that destination. Milman and Pizam (1995) found that familiar repeat tourists had more positive images and a more accurate perception of the destination than respondents who were just aware, or those who were not aware of the destination. It is assumed that image differences may also exist

between family travelers and non-family travelers. According to Brown (1990), childhood travel with family members positively influences an individual's attachment to a destination. Lee (2001) commented that family trips help develop a sense of attachment to a destination. Such an understanding is important for destination marketers especially when they hope to attract a special type of visitors such as repeat visitors and/or family travelers. Based on the above, the first hypothesis for this study was developed as follows:

- Ho<sub>1</sub>: There are no significant image differences between the first time and repeat visitors, and between family and non-family visitors in Oklahoma  
Ha<sub>1</sub>: There are significant image differences between the first time and repeat visitors, and between family and non-family visitors in Oklahoma.

Stabler (1988) suggested that individuals have different images of tourism. This makes it possible to segment markets by appealing to specific nationalities or groups of tourists of differing socio-economic status, ages or interests. It is also possible to differentiate the image according to seasons and activities and facilities offered. For instance, research in travel and tourism has identified age as an important factor that affects tourists' choices of destinations and activities (Mansfeld, 1992). Chen and Kerstetter (1999) observed that tourists from various countries might place different values on destination attributes. Visitors' images toward destinations vary upon their country of origin; destination marketers should employ different promotional strategies in positioning their destinations. It is believed that destination images together with demographic information and travel characteristics would provide more practical implications and make promotions and advertising campaigns more effective.

In order to see whether some significant differences of images exist between various kinds of visitors, the second hypothesis is then developed.

- Ho<sub>2</sub>: There is no significant difference in the perceived destination image dimensions among visitors with different demographics and travel characteristics (e.g. gender, age, country of residence, and purposes of visit);  
Ha<sub>2</sub>: There is significant difference in the perceived destination image dimensions among visitors with different demographics and travel characteristics (e.g. gender, age, country of residence, and purposes of visit).

## Methods

A cross-sectional questionnaire was designed which consisted of five sections. The first section was designed to examine tourists' characteristics and inclined travel behavior such as tourists' visiting purposes, sources of information, intended travel pattern, length of stay, and travel expenditure. The second and third sections of the questionnaire were collections of cognitive images (i.e. destination-based items) and affective images (i.e. psychological items). A total of 27 cognitive items and 22 affective attributes were selected and included in the questionnaire. Respondents were asked to express their agreement on the attractiveness of image attributes on a five-point Likert scale varying from "strongly disagree - (1)" to "strongly agree - (5)". The fourth section reflected Oklahoma's overall attractiveness with two indicators. The final section of the questionnaire referred to the demographic characteristics of respondents including gender, age, place of residence, income, etc.

The target population was all the international visitors who visited the twelve Welcome Centers during the survey period from August to November, 2002. In this study, the Independent Samples t-test was employed to test visitors' perceived differences of image attributes between first-time visitors and repeat visitors, and between family visitors and non-family visitors. Factor analysis was employed to identify the underlying dimensions of the respondents' perception of the destination's cognitive image and affective image, respectively. Both the cognitive dimensions and affective dimensions were used for subsequent analyses. MANOVA and ANOVA were performed to examine the relationship between image dimensions and visitors' demographics and travel behaviors.

## Results

Independent Samples t-test (Table 1, omitted) indicated a statistically significant difference ( $P \leq 0.05$ ) between the perceptions of first-time visitors and repeat visitors on the attributes of "interesting native American history," "appealing American Indian activities," "attractive country & western music," "lots of recreational facilities/activities," "wonderful golfing," "alluring water activities," "get away from crowds of people," "experience adventuresome activities," "keep body fit," "enjoy interesting sports activities," and "obtain favorable prices/discounts." Reviews of all the subgroups' mean scores show that repeat visitors' perception mean scores are generally higher than what are perceived by first-time visitors. This indicates that, generally, repeat visitors held a more positive image than the first-time visitors. The Independent

Samples t-test was also employed to examine whether there is a significant difference in the perception of Oklahoma's image attributes (both cognitive and affective) between family visitors and non-family visitors (Table 2, omitted). This test indicated a statistically significant difference between visitors traveling with family members and visitors traveling without family members on some image attributes. With respects to the image attributes, visitors traveling with family members seem to hold more favorable images of Oklahoma than visitors traveling individually or with others. Based on the above two tests, it shows that significant perceived differences of destination image attributes do exist between these groups, thus, the first null hypothesis which assumes that there are no significant image differences between the first time and repeat visitors, and between family and non-family visitors, is rejected.

The results of factor analysis of cognitive and affective attributes were briefly presented in Table 3 (Factor analysis of affective image dimensions omitted here). Six cognitive dimensions comprising 26 saliently loaded items emerged from the analysis which, accordingly, were labeled as 'cultural attractions'(F1\_c), 'traveling conditions'(F2\_c), 'outdoor recreations'(F3\_c), 'peculiar landscape'(F4\_c), 'local attitudes'(F5\_c), and 'nightlife/ shopping' (F6\_c). Six affective factors were also extracted from the affective attributes, namely, "Relaxation," "Novelty Seeking," "Sports/Keep-fit," "Prestige Seeking," "Safety/Benefit Seeking," and "Thrills/Adventures."

Table 3.  
Factor Analysis - Cognitive Image Dimensions

# of Factors	Factor Labels					
Factor 1_c	Convenience of Traveling					
Factor 2_c	Cultural Attractions					
Factor 3_c	Natural Attractions					
Factor 4_c	Outdoor Recreational Activities					
Factor 5_c	Accommodation/shopping/nightlife, etc.					
Factor 6_c	Local Attitudes					
	<b>F1_c</b>	<b>F2_c</b>	<b>F3_c</b>	<b>F4_c</b>	<b>F5_c</b>	<b>F6_c</b>
<b>Eigenvalue</b>	9.60	2.48	2.20	1.53	1.23	1.18
<b>Variance (percent)</b>	36.91	9.55	8.46	5.89	4.72	4.54
<b>Cumulative variance (percent)</b>	36.91	46.47	54.9	60.8	65.5	70.1
<b>Cronbach's alpha</b>	.85	.84	.81	.81	.82	.89
<b>Summated Mean</b>	3.37	3.56	3.82	4.0	3.63	4.27
<b>Number of items (total=26)</b>	5	4	5	5	5	2
Extraction Method: Principal Component Analysis.						
Rotation Method: Promax with Kaiser Normalization.						

The statistical techniques of MANOVA and ANOVA were employed to examine the relationship between destination image dimensions and visitors' demographics and travel characteristics such as visitors' genders, age groups, countries of residence, visiting times, purposes of visit, and sources of information. Based on the significant results of MANOVA (see Table 4), the univariate ANOVA tests are employed to address the individual issues for each dependent variable (Table 5, omitted). The univariate ANOVA test reveals that the mean scores held by female visitors are generally higher than the male group, both for the cognitive image dimensions and affective image dimensions. Based on the F value and p-value, statistically significant difference is found for the cognitive image dimension of "Accommodation/shopping/nightlife." In terms of the univariate effects by "age", significant difference is found for the affective image dimension of "Novelty Seeking". Post Hoc test using Bonferroni further reveals that significant image difference exists between Group Two (age 31 – 40) and Group Three (age 41 – 50), with Group Two's perception score lower than Group Three.

Since MANOVA did not show a significant multivariate effect with the treatment of "Country of Residence", further discussion on its univariate effects is suspended. In other words, no significant image differences are found between visitors of Canada and Germany. As for the groups of different visiting purposes, the F value is found to be significant with the affective image dimension of "Prestige Seeking". Further Post Hoc test with Bonferroni reveals that, significant image difference exists between Group Two, "VFR" and Group Three, Business and Study respondents, with Group Two's mean score significantly higher than Group Three.

Hypothesis 2 proposes that visitors with different demographic profiles or travel behaviors perceive destinations' image differently. Based on the above analyses, it is found that significant differences exist with some demographic profiles or travel behaviors; while no significant difference is found with other demographic profiles or travel characteristics. Thus, the null hypothesis which proposes that "there is no significant difference in the perceived destination image dimensions among visitors with different demographic profiles and travel characteristics" is partially rejected.

Table 4.  
Tests of Multivariate Effects (MANOVA)

Effect	Dependent Variables	Wilk's Lambda	F	Sig.
Gender	Cognitive	.917	2.297	.038 *
	Affective	.941	1.600	.151
Age	Cognitive	.828	1.162	.272
	Affective	.797	1.403	.098 **
Country of Residence	Cognitive	.885	1.389	.233
	Affective	.883	1.476	.200
Visiting Purposes	Cognitive	.939	.761	.690
	Affective	.923	1.826	.098 **

\*significant multivariate effect at the level of 0.05; \*\* significant multivariate effect at 0.10.

### Discussion and Recommendations

A comparison of the perceptions of Oklahoma's image attributes between the first-time and repeat visitors and between family and non-family visitors revealed statistically significant differences. For instance, repeat visitors tend to have a more favorable image than the first time visitors. The mean scores of repeat visitors' perceptions of most of the cognitive image attributes and affective image attributes were higher than those of first-time visitors'. The change in positive image among repeat visitors also conforms to previous image studies (Chon, 1987, Fakeye and Crompton, 1991, and Gartner 1986), indicating that the number of visits affects the perceived destination image. According to Fakeye and Crompton (1991), this suggests that repeat visitors perceived the "hidden quality", which is not obvious among first-time visitors. As the number of visits increases, travelers have better perceptions toward a travel destination.

In terms of perception difference between family and non-family travelers, one significant item is "experience tranquility". In other words, family travelers have a stronger feeling about Oklahoma as a location to enjoy its tranquil atmosphere. Family visitors also feel more relaxing and closer to nature in Oklahoma than do the non-family visitors. Family visitors have a stronger belief in Oklahoma's attractions such as interesting native American history and cowboy lifestyle. One implication of this finding is that Oklahoma's tourism marketing strategy in promoting Oklahoma as a native American state is a more eligible strategy and should gain more positive response from the international market segment of family travelers. According to Brown (1990), childhood travel with family members positively influences an individual's attachment to a destination. Family trips help develop a sense of attachment to a destination (Lee, 2001). As a consequence, destination marketers need to present their family orientation by promoting, for example, festivals and other events that appeal to such markets.

MANOVA and ANOVA were employed to examine the relationship between destination image dimensions and visitors' demographic profiles and travel characteristics. The significant F-value respectively shows that destination images may be perceived differently by visitors with different demographics and travel characteristics. The finding conforms with the results of previous studies (Mansfeld, 1992, Stabler, 1988).

Comparisons in perceptions of image differences by demographics indicate significant image differences in gender and age. The significant differences in the perceived image of Oklahoma support the result of previous studies stating that destination image is perceived differently by demographics (Baloglu and McCleary, 1999, Chon, 1990, and Fakeye and Crompton, 1991). This study indicates that female respondents had a more favorable perception of Oklahoma than male visitors in the cognitive image dimension of "Accommodation/shopping/nightlife."

As for visitors within different age groups, the findings indicate that visitors at age 41-50 perceived Oklahoma's "Novelty Seeking" image more favorably than younger visitors (age 30-41). Previous studies indicated that visitors within different age groups tend to differ in travel behavior. Furthermore, it is understandable that younger visitors are more likely to seek for fun, while the elders, especially those "empty nesters", are more interested in cultural activities. Stevens (1992) indicated that more affluent and older travelers are less price-sensitive. However, they place a greater importance on high quality travel experiences. Murphy (2001) stated that young and budget-minded tourists exhibit a preference for



inexpensive accommodation, an emphasis on meeting other people (local and outsiders), and independently organized and flexible itinerary, longer rather than brief vacations, and emphasis on informal and participatory recreation activities. A better understanding of the relationship between destination images and age groups will help destination marketers design and promote different kinds of image and tour products packages to cater for people's different kinds of needs and wants.

In summary, the finding of this study empirically supports the statements made in previous studies – there may not exist a general or holistic destination image for a place, instead, a place may generate various kinds of images which are only meaningful when being bound up with different types of people. For example, one slogan may not be good enough to appeal all types of tourists, and destination marketers need to design different kinds of destination images and attractions to appeal to visitors with different demographic profiles and travel characteristics. Besides, this makes it possible to segment markets by appealing to specific nationalities or groups of tourists of differing socio-economic status, ages or interests (Stabler, 1988).

Due to the limited resources and unknown population of international tourists visiting Oklahoma, a convenience sample survey was used which may not represent the population of visitors visiting the Welcome Centers. Besides, the survey was conducted at Oklahoma's twelve Welcome Centers. The international visitors who entered Oklahoma from places other than the Welcome Centers were not covered in this study. The findings of this study may not apply to this part of visitors.

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## Scottish and Australian Student Preferred Learning Styles: A Comparative Study

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### Abstract

This paper provides a comparative analysis of the preferred learning styles of students studying hospitality and tourism programmes in Scotland and Australia depending on the year level of study. It highlights the learning style preferences displayed by different types of students at different stages of their educational experience. It concludes with a discussion regarding the importance of recognising potential changes in learning style preferences as students' progress in their studies.

Key Words: Learning, Hospitality, Education

### Introduction

Understanding how individuals learn has been of academic interest for a number of years, however with current attention focussing on the importance of the knowledge society, the understanding of learning becomes more critical Gold & Smith (2003:1). However understanding learning is not a straightforward process. Merriam (2001: 38) argues that the knowledge base of learning comprises a myriad of theories, models, sets of principles and explanations.

The purpose of the paper is to examine differences in the student learning process from a cognitive perspective. It is proposed that a greater understanding of the student learning process will encourage educational providers to adapt their teaching to best suit the needs of their students. The context for the study is hospitality and tourism students studying in Australia and Scotland. The paper is structured as follows: The literature review examines cognitive learning approaches and exploring how these affect learning styles; the methodology section considers the key research aims and describes the measures used in the study; the results examines the key findings from the study undertaken and the discussion that follows highlights the key implications for hospitality educators.

### Different Types of Learning Styles

Cognitivist theories of learning emphasise the processes involved in learning, rather than the products or outcomes of learning. Both Harrison (2000) and Von Krogh et al. (1994) argue that traditional cognitivist approaches adopt a rationalist stance, viewing cognition as the processing of information and the rule-manipulation of symbols. In agreement, Good and Brophy (1990) argues that cognitivists view learning as a reorganisation of the cognitive structure in which individuals store information. Blanton (1998) argues that our perception is broken up into organised wholes through our ability to organise data so that it makes sense. An important development of cognitive approaches and one that assists us in understanding how cognitive approaches influence behaviour is experiential learning theory. This theory concerns itself with the cognitive processing of experience involving elements of action, reflection and transfer. Experiential approaches are based on the premise that learning can be made more meaningful if it is grounded in the experience and context of the learner and that individuals learn more easily when engaged in active problem-solving (Holman, 2000). The experiential learning cycle involves four learning stages: concrete experience, reflective observation, abstract conceptualisation and active experimentation. Concrete experience involves the individual partaking in a new activity from which learning can occur. Reflective observation entails watching or observing others and/or reflecting on one's own experiences of the activity. Abstract conceptualisation engages the individual in developing a theory to explain the observations and/or activity experienced. Finally, active experimentation involves the testing of such theories in a new situation.

The model also acknowledges the important role played by different types of learning styles. Sadler-Smith et al. (2000) notes that Honey and Mumford's (1986) learning styles questionnaire arose directly from Kolb's experiential learning cycle. The four learning styles identified are: Activist, Reflector, Theorist and Pragmatist. Activists like to involve themselves in new practices and enjoy tackling problems by brainstorming. They appear to be easily bored and prefer to move from one task to the next as the excitement fades. Reflectors are more cautious and thoughtful and prefer to consider

all possible avenues of action before making any decisions. Reflectors students prefer to learn through observation and benefit from the opportunity to think before acting. They appreciate the opportunity to undertake research before an activity and think about what they have learned. Reflectors find it more difficult to learn from activities where they are forced into the limelight, for example through peer presentations or role-playing. Theorists like to integrate their observations into logical models based on analysis and objectivity. They appear to enjoy the structure associated with sound theoretical frameworks. Pragmatists are practical, hands on people who like to apply new ideas immediately. They often get impatient with an over emphasis on reflection. It is argued that a wholly effective learner is proficient in all four styles. Several criticisms have been levelled at experiential learning theory. Reynolds (1998) argues that it promotes an individualized perspective, neglecting the sometimes collectivist nature of learning. Wilson and Beard (2003) argue that by locating itself within the cognitive psychology tradition, experiential learning overlooks or mechanically explains and thus divorces people from the social, historical and cultural aspects of self, thinking and action. A third criticism by Thagard (1996) maintains that cognitive and experiential approaches neglect the role of emotion, reducing learning to a calculating, functional process.

There are at least 32 commercially published instruments being used by researchers and educators to assess the different dimensions of learning styles (Campbell 1991). When determining the appropriateness of choosing the Learning Styles Questionnaire over another tool that measures learning style preferences, it is useful to reflect upon Curry's (1987) onion simile. On analysis of all the available learning style questionnaires, she placed each in one layer of a three-layer system, like an onion. The first layer (or core) presents learning behaviour as controlled at a fundamental level by the central personality dimension. Sadler-Smith (1996) refers to this as learning preferences (autonomous, dependent or collaborative). The middle layer centres on a theme of information processing dimensions. The outermost layer, influenced by the interaction of the environment, is based on the theme of instructional preferences. The Learning Style Questionnaire fits neatly into the middle layer of Curry's (1987) onion model. Marshall (1987) agrees with Curry's (1987) analogy and places the Kolb (1985) Learning Styles Inventory and the Honey and Mumford (1986) Learning Styles Questionnaire firmly in the information processing preference layer of the model. While there has been some criticism regarding the use of the Learning Styles Questionnaire for managers (Duff, 2000), it has been found that this tool is most appropriate to determine the learning style preferences of students, particularly those of diverse backgrounds (Anderson, 1995).

Several studies have been undertaken that attempt to identify the learning preferences of hospitality management students in the UK, Asia and Australia. In his study in the UK, Lashley (1999) found that the vast majority of students who were attracted onto hospitality management display an activist preferred learning style that indicate that they enjoy practical activity, but who are less comfortable with theorising and reflection. Not surprisingly, students with activist learning style preferences learn most easily from activities involving group work that is exciting, challenging and quick to change. On the other hand, activists find it more difficult to learn when they have to take a passive role, not become involved or undertake solitary work. They are not keen on practising and do not enjoy the constraints of having to follow precise instructions (Honey and Mumford, 2000). In contrast, it would appear that domestic students studying hospitality management, hotel and catering management, tourism management and travel and tourism studies at Higher Diploma level and above in various colleges and universities in Hong Kong, Singapore and Taiwan display preferences for Reflector learning styles (Wong, Pine and Tsang, 2000). It is contended that a reason that could influence the learning style is the differing cultural approaches to education. Chan (1999) supports this finding and contends that Chinese history and Confucius philosophy has a major impact on learning styles of Chinese students.

This review of the literature leads us to formulate the two key research propositions that will be tested by means of a cross-cultural sample of Australian and Scottish tourism and hospitality students. In recognition of the research highlighting cultural differences in learning styles (Chan 1999; Wong, Pine and Tsang, 2000), our first research proposition is to examine whether differences exist in the learning style preferences of hospitality and/or tourism management students in Scotland and Australia. In essence, we are seeking to establish whether cross-cultural learning style differences will exist amongst two Anglo-Saxon countries. Our second research proposition is derived from Lashley (1999) study, where he argues that hospitality and tourism students prefer an activist learning style. We are interested in investigating whether learning styles are consistent within a distinct disciplinary field across year cohorts. Consequently, our second research proposition is to examine whether differences in learning preferences exist on the basis of year level of study.

### **Methodology**

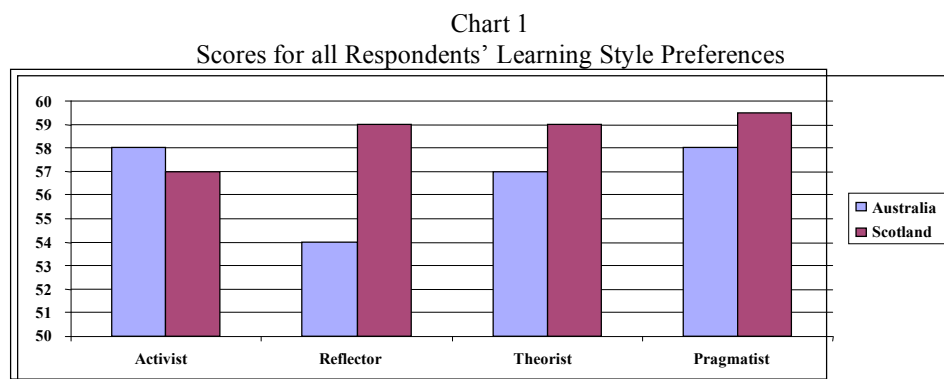
A variation of the Learning Styles Questionnaire designed by Honey and Mumford (2000) was used in this study to investigate the learning styles of domestic and international students studying hospitality and tourism management at a variety of tertiary education institutions in Australia and Scotland. The questionnaire was divided into two parts. The first section asked respondents to answer questions concerning age, gender, nationality, ethnicity and number of dependents. This section also asked questions that attempted to determine motivations for current area of study and reasons for choosing

the particular university. The second section consisted of 80 questions relating to the four different types of learning styles as identified by Honey and Mumford (1986), namely activists, reflectors, theorists and pragmatists. Respondents were asked to express the strength of feeling for each statement on a six-point Likert scale. Respondents were asked to identify on a six-point scale (0 = Strongly Disagree- 5 = Strongly Agree) their strength of feeling for each statement. This means of response differs from the original Honey and Mumford (2000) method of responding which involved respondents merely placing a tick to indicate if they agreed with a statement, or a cross to indicate that they disagreed with a statement. The employment of a scale adds to the sophistication of the responses as it allows respondents to present a more accurate measure of their feelings concerning each question (Lashley and Shaw, 2002). The imposition of an ordinal Likert scale on the previous Honey and Mumford yes/no type measurement will enhance the reliability of the data collected. By employing equal interval measurement, Goodwin (1995) argues that Likert scales allow respondents to express varying degrees of favourability towards a particular item, thus providing enhancing the accuracy of the overall measurement.

In order to achieve an optimum response, and to answer questions students may have had during the completion of the questionnaire, the questionnaire was administered in the controlled environment of formal class time and under the supervision of a tutor. Ticehurst and Veal (1999:138) describe this approach to a questionnaire survey as a 'captive group survey' and suggest that this method of questionnaire administration is expeditious and less problematic than in less controlled situations. The data collected from the second part of the questionnaire, which contained 80 questions on learning styles, (20 per learning style preference) were analysed, using SPSS, by the score of each type of learning style. This translates into a possible maximum score of 100 for each learning style preference. This allowed the researchers to develop frequency tables and undertake cross tabulations. Due to the use of the Likert scale, an indication of likes and dislikes relating to learning styles was determined for each group of students.

### Analysis of Results

In total, some 514 students from nine Australian institutions took part in the study. Seven higher education institutions in Scotland that offer hospitality and/or tourism management at bachelor level or above were invited to take part in the Scottish element of the study and all but one agreed. In total, some 391 students from six Scottish institutions took part in the study. The composition of the respondents was broadly similar in that female respondents outnumbered their male counterparts by at least two to one. In addition, there was an even mix of the number of respondents in each year level. The average age of both the Australian and Scottish sample was just over 22 years.

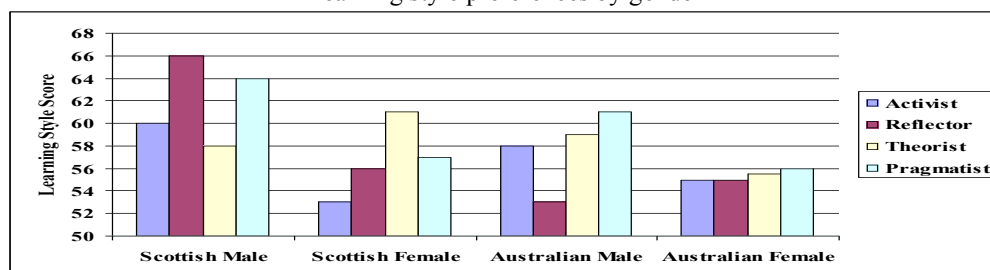


Initial analysis of the results from this survey would suggest that both groups of students might be considered as reasonably well balanced with regard to their preferred learning styles (Chart 1). These results would therefore indicate that both groups of students are relatively comfortable adapting to a range of teaching methods and styles. It can however be seen that the learning style preference with the most disparity between the groups is that of reflector. Indeed, from initial analysis it can be seen that the reflector learning style preference is the most preferred learning style for the Scottish cohort, and the least preferred cohort for the Australian students. This result is important if one considers Lashley's (1999:185) assertion for the development of more "reflective approaches to study and management tasks" amongst students studying hospitality and tourism. Consequently this might indicate a reflective teaching culture evident in Scottish universities from which Australian educators might learn.

It has however, been noted (see for example Barron, 2004) that it is unwise to treat a cohort of students as being one homogenous group. Indeed there is a danger in assuming that the preferred learning style of a group of students is representative of all major and minor sub groups within the cohort. For example, Chart 2 presents an indication of the differences in learning styles of females and males in both the Scottish and Australian samples. This chart clearly indicates

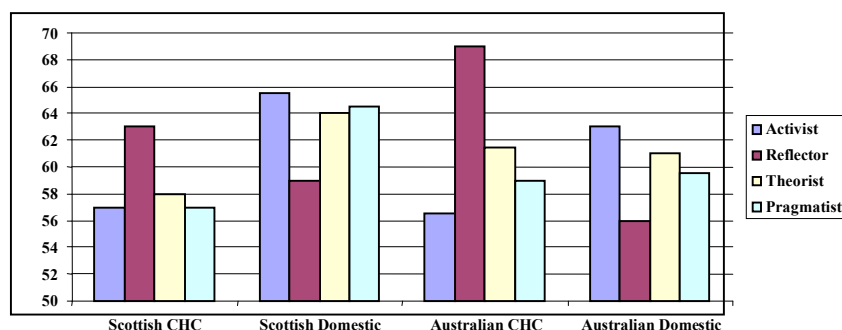
that within these major subgroups, there are differences in preferred learning styles. For instance it can be seen that among Australian males, the least preferred learning style is that of reflector.

Chart 2  
Learning style preferences by gender



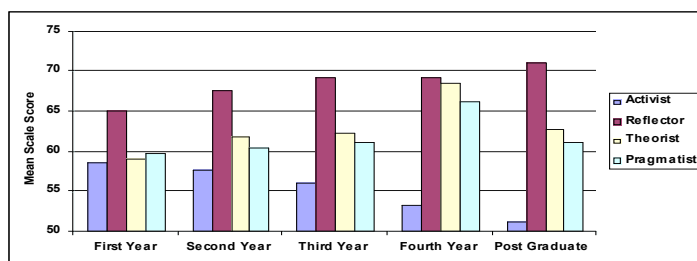
The concept of treating all students as possessing the same learning style preferences is further confused when one considers the increasing diversity of students studying hospitality and tourism in major English speaking destination universities. Chart 3, presents an indication of the differences in learning style preferences of students of Confucian heritage culture (those of Japanese, Korean, Vietnamese or Chinese nationality or ethnicity) in comparison with their domestic counterparts. It can be seen that Confucian heritage culture (CHC) students studying in Scotland, tend to demonstrate lower all round preferences, but have a slight preference for a Reflector style. This is more clearly demonstrated in those CHC students studying in Australia who demonstrate a strong preference for a reflector style and whose least preferred style is that of activist. In both the Scottish and Australian cases, this is exactly the opposite from their domestic counterparts.

Chart 3  
Learning Style Preferences by Nationality/Ethnicity



Further analysis of the data comparing the preferred learning styles on the basis of year of study reveals some additional interesting differences between the two countries. In relation to the Australian sample it can be seen that there is a strong reflector style learning preference through the four years of undergraduate programmes and also postgraduate studies. The preference for activist style learning would appear to decrease as students move through the levels of programme of study. These results may not be surprising as students are likely to be exposed to more opportunities to reflect in their studies, through differing assessment instruments, greater use of case studies and opportunities to relate

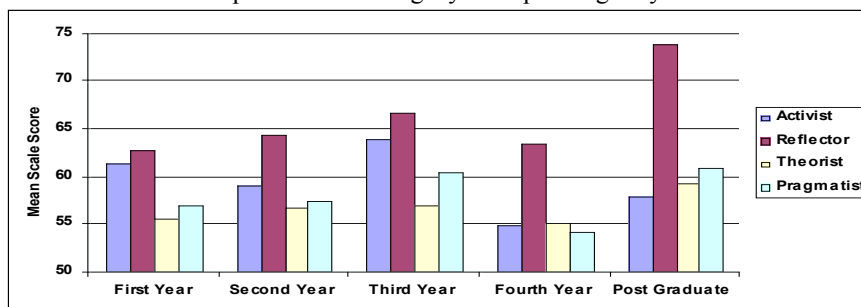
Chart 4  
Australian student's preferred learning styles depending on year level



theory to practice. In addition exposure to industry practice through work placements could also further develop reflection opportunities. With a decreasing emphasis on practical skills and more theoretical input into problem-solving situations, there is likely to be fewer opportunities for students to use and develop their activist learning abilities.

The chart below also indicates that theorising as a preferred learning style increases from first to second year, remaining virtually the same level in third year, but increasing dramatically in year four students. Although it is only possible to speculate reasons for the increase in theorising, possible influences include teaching methods and content that includes greater exposure to, and use of theory. A similar pattern of increased preference for pragmatic learning style, as one moves through the four years of study can also be seen below in the Australian cohort. This increase in the preference for pragmatic learning makes for an interesting balance in relation to the reported preference for reflective learning. This could be related to teaching schedules, or assessment expectations, or it could be reflective of the students attracted to hospitality and tourism programmes. In relation to post-graduate students studying in Australia, the reflector learning style was seen to be the most preferred, followed by theorist, and pragmatist. By far the lowest preferred learning style is activist. Interestingly, the reported extent of theorists and pragmatists is much lower at post-graduate level than year four students. This could be influenced by age, profile of the student body and or content and delivery of programme. Without further analysis of the sample, it is difficult to put forward substantial reasons for this pattern.

Chart 5  
Scottish student's preferred learning styles depending on year level



A different configuration emerges from the Scottish results. Although reflector learning is the most often reported preferred learning style within each level of study, the increase is between year one to year three, with a decline to the similar level as year one in year four. At postgraduate level, it has the highest mean level ( $M=74$ ) and is greater than the Australian sample ( $M=71$ ). These results can be seen to be contrast to Lashley's (1999) work, which found that hospitality management students had a preference for activist learning, but were less comfortable with theorising and reflection.

The mean scores for theorising in the Scottish sample fluctuates between 55-57 across the four years, with the lowest reported level in year four. Although there is a slight increase in the preference for theorist learning moving from year one to year three, there is a subsequent decline in year four. The year four results could indicate an area of concern for Scottish institutions in relation to a perceived lack of preference for a theorising style of learning. It appears that current students either do not like, or are not given the opportunity, or are not able to demonstrate theorising learning skills. It might be expected that a theorising preference would be evidenced as students progress through a degree level programme, however this does not appear to be the case for the Scottish based students. These results could support the views expressed by Linstead et al (2004) concerning a focus on practical techniques, although the result merely highlights a lack of preference for learning through theorising, rather than a lack of theory underpinning their learning. The preference for pragmatic learning also increases between years one to three, but declines to its lowest level in year four. At postgraduate level, the Scottish results indicate that the preference for pragmatic learning is greater than theorising. This is in contrast to the Australian sample.

The preference for activist learning style is reported to be relatively popular across year one, two, and with post-graduate students. It is particularly high with year three students, but declines for year four students. It is unclear why the degree of preference for activist style learning is so high in year three, of the Scottish based students but this could be related to work placement activities (which are often scheduled within year three of programmes of study), teaching and assessment methods that encourage activist learning, like group work, presentations or problem solving. In Scotland there are also many students articulating into year three from either Further Education colleges or overseas institutions. It is likely that these students have been exposed to different learning cultures and approaches that have influenced their learning style.

In comparing the results of the Scottish and Australian samples, some interesting observations can be discussed. At an undergraduate level, the Scottish results indicate a lower preference for reflection, theorising and pragmatism than their Australian counterparts, but there is a greater preference for activist learning. This is in contrast to the initial analysis of the two groups taken as a whole entity, which reported a higher preference for reflection, by the Scottish students. These results contradict Lashley's (1999) findings and could be as a consequence of programme design issues, student profiles, learning environment and content issues discussed earlier.

In relation to theorising and pragmatic learning styles, again the Scottish cohort reports less emphasis on these as preferred learning styles than the Australian results. At post-graduate level the preference for theorising as a learning style increases to a mean of 59. When compared with the Australian cohort this is a lower reported preference across all years. At post-graduate level it appears that there is a stronger preference for activist and reflective learning styles reported by the Scottish than the Australian cohort, with a preference for learning through theorising being more prevalent in the Australian students than the Scottish. The reported preference for pragmatic learning is similar between the two samples.

### **Conclusions and Recommendations**

This research has demonstrated that while there are some general similarities between students studying hospitality and tourism in Scotland and Australia, the composition of both cohorts presents a more complex picture. Through analysing the data based on gender, ethnicity and year of study, an understanding of the complex nature of student preferred learning styles emerge. This study has provided data that supports both the research propositions forwarded. Firstly, there do appear to be marked learning differences between the students studying in Scotland and those in Australia. These are seen to be more evident when examining the data on the basis of gender and ethnicity. Secondly, there are also differences in learning styles on the basis of year of study that have been discussed earlier in this paper.

The consequences of diversity amongst students' preferred learning styles presents lecturing staff with a number of challenges, particularly in Scotland with the reported dislike of learning through theorising. First amongst these is the ability to cope with such a variety of styles during the delivery and assessment of subjects. It might be suggested that the different learning style preferences as demonstrated is an advantage and should be celebrated. The preference for reflector learning style by both the Scottish and Australian cohorts, contrasts Lashley's (1999) work in this area. However, the least preferred learning style in CHC students was activists, supporting the work of Wong et al (2000). This result would indicate that students would be receptive to learning and assessment strategies that encourage a more reflective approach to their studies. With the Australian results indicating that students also enjoy theorising, this would support the introduction of a more critical focus for their studies. This might be more difficult to introduce in the Scottish institutions.

In addition, this work highlights how an understanding of preferred learning styles might be taken into consideration when developing new subjects and programs, considering and implementing new teaching methods and, planning assessment strategies. For example, if educators are seeking to produce graduates who are measured in their decision making process and who take the opportunity to reflect on a range of options, then effort should be concentrated in developing a more reflective approach among Australian male students and year four Scottish student groups.

### **Implications for Hospitality Educators**

The results of the study have important implications for future theory and practice in the field of hospitality education. Firstly, it can be argued that this research provides empirical data on preferred learning in an international context that enables comparative analysis to be practised. The study presents important findings in relation to differences in learning styles according to educational cohort or year of study. The finding suggests that educators cannot assume the same mix of learning styles within each group, but need to adjust their teaching techniques to suit the individual group.

The cross-cultural aspect the study highlighted significant differences in the learning styles of Australian and Scottish students, based on gender, ethnicity and year of study. In an age of e-learning and global travel, educators must themselves adapt cross-culturally when delivering teaching and training in a different cultural environment. Educators

should not simply assume that as students come from an Anglo-Saxon country that they would have an identical learning style preference. Particular attention should also be paid to implications for e-learning. As more and more third-level institutions are delivering courses to overseas students through an e-learning environment, there is a distinct need to establish the preferred learning styles of these students so that learning materials can be modified in order to cater for such students.

Viewed positively, hospitality and tourism educators might use these identified differences to the advantage of all students. This might be achieved by using alternative means of programme delivery and assessment that seek to develop students learning abilities. For example, encouraging students to present summaries of theories, highlighting inconsistencies, greater use of case studies can help to develop critical and analytical abilities. Revising strategies to develop a more reflective approach in students who display activist preferences might be achieved through using learning plans and logs. Presenting more rigorously structured subjects to students who have pragmatic preferences can help develop their reflection skills. For students who have a dislike for activist learning, encouraging them to take the lead in presentations and discussions in a non-threatening environment, can help develop their learning abilities.

In addition, educators may find that where learning style preferences are concerned, students learn from each other. Simply encouraging diversity in, for example, group exercises will result in the development of more rounded approaches to learning, and making students aware of their learning style preferences can alert them to aspects of learning that they should develop. More formal means of encouraging this can be through the implementation of learning sets or learning communities, which are deliberately composed of students with different learning style preferences. These can encourage students to be more aware of other students' strengths and weaknesses, as well enabling peer support to be developed in learning.

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## **Evaluating Teaching Effectiveness in a Quantity Foods Laboratory Setting: Phase Four – Pilot Testing the Instrument**

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### **Abstract**

This is the fourth phase of a research project to develop a student evaluation tool (SET) to evaluate teaching effectiveness in a quantity food laboratory taught at senior institutions. In phase one, the researchers sought assistance from experts to conduct a Delphi panel study to develop the instrument. In Phase Two, the researchers solicited feedback from a national sample of hospitality educators regarding the importance of the SET items. Phase Three involved gathering feedback from students who were alumni of a quantity food course. The goal of Phase Four is to test the instrument among students enrolled in the course.

**Key Words:** Quantity food laboratory, Teaching effectiveness criteria, Student evaluation tool (SET)

### **Introduction**

To ensure continuous improvement, providing and receiving performance feedback is a key concept in any job. Within the academy, educators are routinely evaluated by students (and their peers) using some form of evaluation tool. Are these tools effective? Are these tools used universally throughout all teaching environments? An evaluation tool serves many functions: (1) providing feedback, (2) identifying training and development needs, (3) making decisions linking rewards and discipline to performance, (4) evaluating policies, programs, or training, and (5) validating the selection process (Woods, 2002). Within the academic community, all five of the previous functions pertain to the classroom.

Most educators (including the authors of this research) would contend that different evaluation tools should be implemented in the various types of classroom environments. A traditional, lecture style class is different than a laboratory setting. It follows, then, that these two disparate types of learning environments should not use the same teaching effectiveness evaluation tool. Frequently the same evaluation form is used, with the exception that the word “classroom” is replaced with “laboratory.” The most critical question is: does this simple change allow for a truly accurate and fair evaluation of instruction in the laboratory classroom setting?

After conducting a thorough review of all existing literature to answer this question, the authors determined that there is no existing, current, or planned research literature that is applicable. An expanded literature search included research and education journals covering clinical laboratories for education, all medical fields, as well as the evaluation of instruction for all human resource development and military training programs. All existing literature relevant to the topic was reviewed, and it yielded limited research that was applicable to this research question.

### **Purpose of the Study**

The research and findings described in this manuscript represent the fourth phase in an ongoing project that began in 2003. In phase one of the project, the researchers developed a student evaluation tool (SET) for evaluating teaching effectiveness in a quantity food laboratory taught at four-year institutions. A Delphi panel of leading educators was convened to identify the most appropriate criteria for measuring teaching effectiveness in the quantity food laboratory. A SET with 27 criteria was developed (Chandler, Finley, Weber & 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 & 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, & Finley, 2005)

The fourth phase of the project involves pilot testing the student evaluation instrument in quantity food laboratory settings at senior institutions nationwide during both the Fall 2005 and Spring 2006 semesters. Students will rate the performance of their respective instructors, and these ratings will be compared to the findings reported from Phase Three of this project. In addition, the researchers will test the reliability of the instrument, and they will conduct a series of higher level statistical analyses, including factor analysis to minimize the number of variables.

### **Review of Literature**

The literature review pursued several subjects pertinent to the development of a student evaluation tool to be used in quantity food production laboratories. This particular type of laboratory class varies greatly from any standard university lecture course. Current evaluation tools such as the ones required by accrediting agencies are designed for the evaluation of standard lecture classes and are considered unsuitable for evaluation of quantity food production laboratory courses. There is a gaping hole in the literature pertaining to evaluations for this purpose. There have been no studies aimed at collecting student evaluations of teaching effectiveness in quantity food production laboratory courses. Therefore, the review of literature covered the Delphi Method, Student Perceptions of Quantity Food Laboratories, and Clinical Teaching Evaluation.

#### *The Delphi Method*

The Delphi method was developed during the 1950s at Rand Corporation to make effective use of potential intra-group interaction (Breiner, Cuhls, & Grupp, 1994). The method has proved to be especially appropriate when the subject matter lends itself to conducting subjective (qualitative) rather than quantitative analysis (Linstone & Turoff, 1975). The central aim of the Delphi is to eliminate any direct confrontation between the experts and to allow judgment to reach a consensus based upon increasing amounts of information becoming available (Prendergast & Marr, 1994). A Delphi study involves a number of considerations, including: the selection of panelists; the design of the questionnaire; the provision of feedback; and a decision on the number of rounds to be conducted (Yong, Keng, & Leng, 1988).

#### *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 & Robson, 1990).

#### *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. There are questions, however, as to whether the results from SETs alone give a one-dimensional limited view of the classroom (Marsh & 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 & 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.

### *Clinical Evaluation*

In an effort to find research in the evaluation of laboratory instructors, clinical evaluation was investigated. When evaluating clinical teaching, most of these laboratory settings are in hospitals with most programs using the Stanford Faculty Development Program (SFDP). The SFDP uses a dissemination model to improve instructional skills of clinical teachers (Skeff, Stratos, Bergen, & Albright, 1992). The SFDP provides a framework of seven educational categories for clinical teaching, which are: (1) provide a positive learning environment, (2) control the teaching session, (3) communicate goals, (4) promote understanding and retention, (5) evaluation, (6) provide feedback, and (7) promote self directed learning (Litzelman, Stratos, Marriott, & Skeff, 1998).

In a study by Litzelman, Stratos, Marroitt, and Skeff (1998), the purpose was "to examine an instrument for evaluating clinical teaching using factor analysis and to refine the validated instrument to a practical length" (p. 688). The results of a study "suggest that students' perceptions of teachers' content knowledge and ability to promote self-directed learning are included in the same facet of teaching effectiveness" (p. 694).

A study by Feil (1982) "describes how three potential sources of measurement error (criterion statements, rating scales, and raters) were manipulated in an effort to improve the reliability of a preclinical technic laboratory evaluation system" (p. 490). He suggested the need to employ an evaluation system and data analysis system that are both prescriptive and descriptive. And finally, his study showed that reliability can be increased with the use of two raters versus the traditional one rater (Feil, 1982).

### **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. Ten 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, Oklahoma State University, and the University of Houston. In October 2005, appropriate quantities of the original student evaluation tool (SET) developed by the Delphi panel were distributed to each of the participating institutions, along with Scantron sheets to facilitate data entry. The evaluation instrument was modified to collect demographic information from the responding students. Faculty at the participating institutions were asked to administer the evaluation instrument before the end of November, and they were provided with self-addressed, postage-paid envelopes for returning the completed instruments to the researchers. Data were received for the Fall 2005 semester from nine universities, and arrangements are in place to replicate this procedure during the Spring 2006 semester.

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. The evaluation instrument is included in the Appendix. Demographic information requested included 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. 13.0). The first stage of the analysis explored and compared descriptive statistics for the 27 items of the evaluation instrument. The second stage of the analysis considered the content

and construct validity and reliability of the instrument. Next, a factor analysis was conducted to reduce a large number of variables to a smaller number of factors, and to describe the relationships among the observed variables.

### ***Findings – Fall 2005***

The data for Fall 2005 consisted of 335 useable instruments among the 345 that were received (97%) from nine of the ten universities. Ten responses were deleted because of incomplete evaluation and/or demographic data. Among useable responses, there were 135 male (41%) and 197 female respondents (59%). Ninety-four percent of the respondents were in their junior or senior year of studies, and 94% expected to earn a grade of “B” or higher. Lastly, 58% of the respondents thought the survey was better than the survey sponsored by their university.

The means for the 27 criteria ranged from 3.84 to 4.60 (SD range: 0.722 to .998). Table 1 indicates the mean, standard deviation, and 95% confidence interval (lower and upper bound) for each of the 27 criteria of the evaluation instrument.

Table 1  
Descriptive Statistics and Reliability (N = 335)

Criteria	Mean	SD	95% Confidence Interval		Alpha
			Lower Bound	Higher Bound	
#1	3.93	.942	3.83	4.03	.957
#2	3.93	.942	3.83	4.04	.958
#3	3.88	.996	3.77	3.99	.958
#4	4.16	.996	4.05	4.27	.957
#5	4.13	.949	4.03	4.24	.957
#6	4.60	.722	4.53	4.68	.958
#7	4.39	.895	4.29	4.48	.957
#8	4.17	.970	4.07	4.28	.958
#9	4.25	.913	4.15	4.35	.957
#10	4.40	.886	4.30	4.50	.957
#11	4.50	.758	4.42	4.58	.957
#12	4.31	.832	4.22	4.40	.957
#13	4.18	.947	4.08	4.28	.957
#14	4.20	.894	4.10	4.29	.957
#15	4.06	.998	3.95	4.17	.957
#16	4.22	.892	4.13	4.32	.957
#17	4.04	.926	3.94	4.14	.957
#18	3.91	.959	3.81	4.01	.957
#19	4.31	.901	4.21	4.40	.957
#20	4.31	.864	4.21	4.40	.957
#21	4.39	.868	4.30	4.48	.958
#22	4.17	.856	4.08	4.26	.957
#23	4.20	.821	4.11	4.29	.957
#24	4.16	.889	4.06	4.25	.957
#25	4.13	.930	4.03	4.23	.957
#26	4.01	.896	3.91	4.10	.957
#27	3.84	.962	3.74	3.94	.959

The next aspect to the analysis concerned validity and reliability. The instrument for measuring teaching effectiveness that was developed by a Delphi panel has been reviewed and evaluated by both CHRIE educators and hospitality management students. In both studies, the respondents expressed favorable opinions of all criteria items contained in this instrument. Based on these findings and analysis, it is the consensus of the researchers that the findings of this research project have supported the construct and content validity of the survey instrument that was developed by the Delphi panel in 2003 (Weber, Chandler, & Finley, 2005)

Reliability was calculated using Cronbach's alpha. To assess internal consistency of continuous scores, a reliability analysis was conducted using SPSS. A coefficient alpha for all 27 variables was produced (see Table 1), the coefficients for all items ranged from .957 to .959, and the overall coefficient was .953. As suggested by Nunnally (1978), 0.7 is an acceptable reliability coefficient, but lower thresholds are sometimes used in the literature.

The next step is to conduct a factor analysis on the 27 criteria items. The data has a fairly normal distribution with skewness ranging from -2.116 (criteria 6) to -.504 (criteria 27). Kurtosis ranged from -.235 (criteria 26) to 4.972 (criteria 6). According to Tabachnick and Fidell (2001), the preferred range is plus/minus 3.0. The kurtosis values above zero indicate a distribution that is too peaked with short, thick tails; the one kurtosis value below zero indicates a flat distribution (Tabachnick and Fidell, 2001). After reviewing the histograms for the 27 criteria items, only three criteria have a kurtosis value outside the acceptable limit (#6, #11, and #21). These items are peaked with responses of "5" on the survey, and are not drastically outside of the normal distribution curve. The Principal Investigator will provide the complete statistical analysis to interested individuals upon request.

After this initial analysis of the data set, a factor analysis was performed. An alpha extraction method was chosen to maximize the alpha reliability. A varimax rotation was chosen to minimize the number of high loadings on each factor. The results yielded 4 criteria with eigenvalues greater than one, and explaining 65.15% of the variance. See Table 2 for the results.

Table 2  
Factor Analysis

Criteria	Eig.	% of Var.	Cum. %
#1	13.197	48.877	48.877
#2	1.815	6.722	55.600
#3	1.468	5.438	61.037
#4	1.109	4.108	65.146
#5	.837	3.100	68.246
#6	.801	2.965	71.211
#7	.711	2.632	73.843
#8	.601	2.224	76.067
#9	.564	2.088	78.155
#10	.541	2.004	80.158
#11	.507	1.877	82.035
#12	.454	1.683	83.719
#13	.422	1.564	85.282
#14	.394	1.460	86.742
#15	.383	1.418	88.160
#16	.364	1.350	89.510
#17	.328	1.214	90.724
#18	.326	1.206	91.930
#19	.308	1.142	93.071
#20	.287	1.062	94.134
#21	.257	.953	95.087
#22	.252	.935	96.022
#23	.234	.868	96.889
#24	.225	.834	97.723
#25	.222	.823	98.546
#26	.209	.774	99.320
#27	.184	.680	100.00

Upon further review of the loading matrix, it is evident that there is only one major factor with consistent loads above .32 (Comrey & Lee, 1992). They suggest loadings in excess of .71 (50% overlapping variance) are excellent; .63 loadings (40% overlapping variance) are very good; .55 loadings (30% overlapping variance) are good; .45 loadings (20% overlapping variance) are fair; and .32 loadings (10% overlapping variance) are poor (Comrey & Lee, 1992).

## Discussion

The most significant finding of this phase of the research was the high degree of reliability of the evaluation instrument. This was supported by the Cronbach's coefficient alpha, which explained 95% of the variance of the entire evaluation instrument, as well as within each of the 27 criteria. As stated previously, the content and construct validity were well-documented and supported by findings reported from Phases Two and Three of the project.

Perhaps the most surprising finding reported was that less than 60% of all respondents favored this instrument, as compared to the evaluation instrument currently being used at their respective universities. The researchers intend to pursue this issue further when the study is replicated at these ten universities during the Spring 2006 semester.

Within the construct of the evaluation instrument, items are grouped in a manner that allows respondents to evaluate the course, the instructor, and students' participation and involvement in the learning activities. The researchers felt that it was interesting that these 27 criteria loaded into a single factor, both before and after the varimax rotation was performed, rather than into three factors. Currently, it is unclear as to whether this single-factor loading might be the result of having only 335 useable responses available for this phase of the analysis. This issue will be considered more closely during the Spring 2006 analyses, with consideration given to further higher level data analyses.

### Implications for Future Research

Much work remains to be done in this research venue. After completing Phase Four in the Spring 2006 semester, the researchers would like to re-convene the original Delphi panel to consider the appropriateness of this specific evaluation instrument for application in other food laboratory environments. In addition to students' evaluation of teaching effectiveness, much work is needed in the venue of peer observation of instruction in laboratory settings. The collective experience of this team of researchers has been that evaluative tools currently being utilized are not appropriate for application in a quantity food laboratory setting.

### Conclusion

The purpose of this study is to conduct a pilot test of the student evaluation tool (SET) that was developed and tested during preceding phases of this ongoing research project. The findings reported in this manuscript are preliminary, in that they reflect the results of only the data collected during the Fall 2005 semester, rather than the two semesters that are being considered for this research project.

Although the study findings are certainly not conclusive, the findings at this intermediate stage of the pilot test provide strong support for the high degree of reliability of this student evaluation instrument that was designed, developed and tested for application in a quantity food laboratory environment.

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Appendix  
Evaluating Teaching Effectiveness in a Quantity Food Laboratory

The course:		<b>Never ..... Always</b>				
1.	Outlined the skill competencies that are to be mastered and demonstrated by students.	1	2	3	4	5
		<b>Never ..... Always</b>				
2.	Challenged students to demonstrate mastery of skills and/or competencies that increase in complexity.	1	2	3	4	5
		<b>Never ..... Always</b>				
3.	Included one or more appropriate instruments for objective evaluation of students' performance.	1	2	3	4	5
The instructor:		<b>Unacceptable ..... Outstanding</b>				
4.	Demonstrated appropriate hands-on skills adequately.	1	2	3	4	5
		<b>Never ..... Always</b>				
5.	Demonstrated professional rapport with students.	1	2	3	4	5
		<b>Never ..... Always</b>				
6.	Was dressed professionally for the laboratory.	1	2	3	4	5
		<b>Never ..... Always</b>				
7.	Used appropriate terminology.	1	2	3	4	5
		<b>Never ..... Always</b>				
8.	Maintained regular office hours to assist students as needed.	1	2	3	4	5
		<b>Never ..... Always</b>				



9.	Demonstrated appropriate body language when communicating with students.	1	2	3	4	5
		<b>Never ..... Always</b>				
10.	Was willing to help students with questions and concerns.	1	2	3	4	5
		<b>Unacceptable .....Outstanding</b>				
11.	Maintained a safe, sanitary, and organized workspace.	1	2	3	4	5
		<b>Never ..... Always</b>				
12.	Demonstrated the appropriate behaviors and skills to the students.	1	2	3	4	5
		<b>Never ..... Always</b>				
13.	Defined the structure and objectives of the laboratory session prior to or at the beginning of the session.	1	2	3	4	5
		<b>Never ..... Always</b>				
14.	Ensured that appropriate materials and/or supplies were available to accomplish class objectives.	1	2	3	4	5
		<b>Never ..... Always</b>				
15.	Provided regular and useful feedback to students.	1	2	3	4	5
		<b>Never ..... Always</b>				
16.	Utilized professional expertise and knowledge from a variety of sources.	1	2	3	4	5
		<b>Never ..... Always</b>				
17.	Adapted teaching methods to meet varying student needs and circumstances.	1	2	3	4	5
		<b>Unacceptable .....Outstanding</b>				
18.	Used a variety of instructional methods to develop critical thinking and problem solving skills.	1	2	3	4	5
		<b>Never ..... Always</b>				
19.	Created a positive laboratory environment.	1	2	3	4	5
		<b>Never ..... Always</b>				
The students:		<b>Never ..... Always</b>				
20.	Were actively engaged in laboratory experiences.	1	2	3	4	5
		<b>Never ..... Always</b>				
21.	Were dressed professionally for the laboratory.	1	2	3	4	5
		<b>Unacceptable .....Outstanding</b>				

22.	Modeled the appropriate behaviors and skills that had been demonstrated by the laboratory instructor.	1	2	3	4	5
		<b>Never ..... Always</b>				
23.	Followed the policies and procedures outlined for the course.	1	2	3	4	5
		<b>Unacceptable ..... Outstanding</b>				
24.	Synthesized knowledge and applied appropriate abilities and skills.	1	2	3	4	5
		<b>Never ..... Always</b>				
25.	Used the laboratory time effectively.	1	2	3	4	5
		<b>Unacceptable ..... Outstanding</b>				
26.	Demonstrated the application of critical thinking skills.	1	2	3	4	5
		<b>Never ..... Always</b>				
27.	Were prepared in advance with necessary readings and assignments completed.	1	2	3	4	5

## Leadership Roles and Job Satisfaction of Restaurant Managers

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### Abstract

Leadership roles (using Quinn's Competing Values Framework) utilized by managers of fast casual, casual, and quick service restaurants were compared for differences. Fast casual managers utilize the greatest balance of leadership roles and are the most effective according to Quinn's model. Quick service managers have the highest level of job satisfaction but utilize leadership roles less than other managers. Teamwork and people skills have a strong relationship with job satisfaction for quick service managers; planning and goal setting are related to job satisfaction for fast casual managers; and developing people is related to job satisfaction for casual managers.

Key Words: leadership roles, job satisfaction, fast casual

### Introduction

The restaurant industry is comprised of numerous types of operations, often classified into the categories of fine dining, casual dining, family dining, and quick service. Each type of restaurant has a unique mix of operational characteristics that require managers in different segments to have a different set of skills, knowledge, and leadership style to be effective. A new segment in the restaurant industry, fast casual, has developed and experienced rapid growth in the last decade. This segment incorporates the food quality and service quality of the casual restaurant with the speed, efficiency, and lower prices of the quick service segment. The growth of fast casual operations has caused changes in the restaurant industry. As suggested by Gould (2005, p.5) "... these operations are forcing quick serve restaurants to upgrade their culinary offerings, ambience, and service, while also pulling profits from some casual players, who, in turn are being forced to increase their takeout offerings."

While it is agreed that different types of restaurants require a different managerial skill set, identification of those skills has not been fully explored. The purpose of this study was to identify the types of leadership styles utilized by managers in the casual, fast casual, and quick service segments of the restaurant industry and to examine the relationship between leadership style and job satisfaction.

A second purpose of this project was to analyze the relationship between leadership style and management retention. Research has shown a correlation between satisfaction and retention in many types of occupations. An understanding of how leadership style is related to job satisfaction may provide some insight into the high turnover rate for restaurant managers.

### Literature Review/Theoretical Base

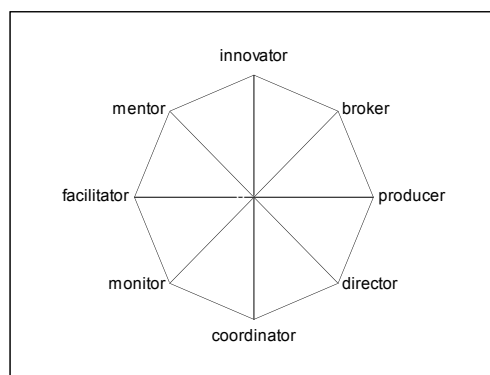
Quinn's (1988) Competing Values Framework serves as the theoretical base for this research project. Quinn's model identifies eight leadership roles (facilitator, mentor, innovator, broker, producer, director, coordinator, and monitor) that are required of managers, in various degrees, in any type of business or operation. Quinn's model is based on two dimensions, focus (internal focus or external focus) and structure (stability or flexibility). The model incorporates four separate models of organizational theory which, on the surface, seem to contradict one another. Quinn labels these models as human resources (the team), open systems (adhocracy), rational goal (the firm), and internal process (the hierarchy). Quinn's framework is perhaps best viewed graphically (see Figure 1), as he places each of the four organizational theory models into a quadrant formed by two axes of focus and structure; he then places two leadership styles in each quadrant. While the styles in the opposite quadrants are polar opposites, they share some characteristics with those next to them.

Quinn labeled his framework as "competing values" because it is his belief that while some of the leadership styles seem to conflict with one another, an effective manager must use all styles. He conducted research with managers in different types of industries in an effort to identify the pattern of leadership styles that provided the most effective leader. What he found was that effective managers display a balanced use of the leadership roles, or leadership styles. An effective manager does not have to utilize all leadership roles, but must be able to utilize most of them. A manager weak in three or more of the leadership roles tend to be judged as ineffective. Quinn (1988) describes ineffective managers as those who "do poorly on nearly all of the roles" and those that "exceed the mean on just three or four of the roles (p. 105). Following are brief descriptions of the eight leadership roles used in Quinn's Competing Values Framework:

- Producer: task oriented, work and goal accomplishment focus, high energy

- Director: Planning, goal setting, defines problems, generates and evaluates policies, clarifies expectations
- Broker: Maintaining external legitimacy and resources, persuasive and politically astute, reputation and image important
- Innovator: Facilitate change, conceptualizes needed change, creative or big picture thinker
- Facilitator: Build cohesion, develop teamwork, manage personal conflict
- Mentor: Develops people, gives credit, empathetic and approachable
- Monitor: Technical analysis, determine if unit is operating at expected levels and people are following rules, detail orientation
- Coordinator: Maintain structure and minimize disruptions, budget and schedule preparation, develop proposals, reliable and dependable

Figure 1  
Quinn's Competing Values Framework



Recent research has been conducted to identify leadership styles among managers of different types of retail operations, which examined relationships among leadership styles and type of retail operation, job satisfaction, organizational commitment, and career progression (Shin, Lush, & Goldsberry, 2002). Using Quinn's framework, they found that managers with a balanced but average profile of leadership styles had a career progression as rapid as those that had an above average profile for the leadership styles. They also reported that effective managers in different types of retail operations displayed different leadership profiles, and that leadership style is influenced by the demographic characteristics of education, gender, and ethnicity.

In the restaurant industry, research has been completed that identifies differences in managerial tasks and skills between the restaurant industry and the hotel industry, but little has been done in examining differences among specific segments of the restaurant industry. One study has identified differences in work environment among five restaurant segments (Wilkinson, 2005). Ghiselli, La Lopa, and Bai (2001) analyzed the relationships among job satisfaction, life satisfaction, and turnover intent among restaurant managers. They reported that intrinsic job satisfaction, life satisfaction, race and age were associated with short term turnover intention, and that all but age were also associated with long term intent to turnover.

While research has been conducted on identifying where hospitality students want to work in specific segments of the restaurant and hotel industry (Woods & Sciarini, 1997), it is limited in that it is based on student perceptions, not actual work conditions or environment. Work has been done to identify differences in skills required between restaurant managers and district managers (supervisors of more than one restaurant), but the type of restaurant was not considered. In general, little research has been conducted on the fast casual segment of the restaurant industry, as it is an emerging concept with a short history.

### Methodology

A survey was developed using items from Quinn's Competing Values Leadership Instrument to assess leadership roles, and using Cammann's work (1983) to develop items to assess overall job satisfaction and intent to turnover. The survey contained Likert scaled questions to assess leadership style, job satisfaction, and intent to turnover, as well as questions designed to obtain demographic information.

A random sample of restaurants was selected and surveys mailed directly to the manager. The population consisted of restaurant brands/chains listed in the Nation's Restaurant News top 200 companies and classified as either casual, fast casual, or quick serve (May 2005). For statistical and generalizability purposes, 40 respondents in each of the three restaurant types was desired. Simerson (1985) recommends a minimum of 20 supervisors be utilized to develop a pattern for a given occupation. Based on previous research, a response rate of approximately 20% was anticipated. Therefore 220 restaurants in each category were randomly selected. A stratified selection process, based on restaurant sales in each state, was utilized to further insure generalizability of the sample. Cities from each state were randomly selected; restaurant addresses were then located in each city using Yahoo Yellow Pages.

Survey instruments were developed and mailed, with letter of introduction and purpose, and return envelope. Surveys were not coded (except for restaurant type), and were return mailed directly to the researcher to insure confidentiality of responses. The cover letter clearly indicated that employers or supervisors would not have access to the surveys, as managers might otherwise feel hesitant to answer questions related to intent to leave.

## Results

Surveys were returned by 54 restaurant managers. The age of respondents ranged from 20 to 56 years, with an average of 36 years; 63% were male. Roughly one third each had a high school education, some college or associate's degree, or bachelor's degree. The respondents averaged 15 years of foodservice work experience, 12 years of management experience, and 6 years with the present employer. As seen in Table 1, casual restaurant managers tended to have the most experience, and fast casual managers the least.

Table 1  
Years of Work Experience by Restaurant Managers

	Food Service Experience	Management Experience	Experience with Present Company
Casual Managers	18.9 <sup>a</sup>	14.3	5.2 <sup>b</sup>
Quick Service Managers	13.7 <sup>ab</sup>	10.9	9.6 <sup>a</sup>
Fast Casual Managers	12.5 <sup>b</sup>	10.4	3.4 <sup>b</sup>
All Managers	15.0	11.9	6.0

Note: Numbers with different subscripts have different means at the .05 level of significance.

*Is there a significant difference in the eight leadership roles utilized among casual, fast casual, and quick service restaurant managers?*

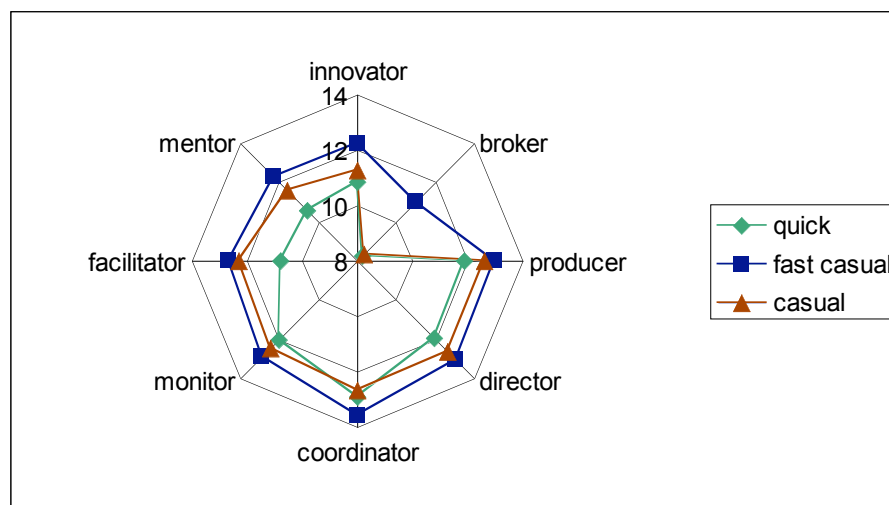
MANOVA tests indicated a significant difference,  $F(16, 90)$ ,  $p = .02$ , in the leadership styles used among the three type of restaurant managers. Follow test indicated that fast casual managers utilized more of the leadership roles than managers in casual or quick serve restaurants. Significant differences were found in five of the eight leadership roles. Fast casual managers utilized the role of broker more than casual or quick service managers, they utilized the roles of mentor and producer more than quick service managers, and they utilized the role of coordinator more than casual managers. Fast casual and casual managers both utilized the role of facilitator more than did quick service managers. Mean scores for the leadership roles as reported by managers are displayed in Table 2 and on Quinn's framework in Figure 2.

Table 2  
Mean Scores of Leadership Roles by Restaurant Managers

	Fast Casual	Casual	Quick Service
Innovator	12.26	11.28	10.82
Broker	11.05 <sup>a</sup>	8.39 <sup>b</sup>	8.24 <sup>b</sup>
Producer	12.95 <sup>a</sup>	12.61 <sup>ab</sup>	11.88 <sup>b</sup>
Director	13.00	12.64	11.94
Coordinator	13.58 <sup>a</sup>	12.67 <sup>b</sup>	12.88 <sup>ab</sup>
Monitor	12.84	12.50	12.00
Facilitator	12.68 <sup>a</sup>	12.28 <sup>a</sup>	10.76 <sup>b</sup>
Mentor	12.31 <sup>a</sup>	11.56 <sup>ab</sup>	10.59 <sup>b</sup>

Note: Numbers with different subscripts have different means at the .05 level of significance.

Figure 2  
Leadership Role Profiles of Restaurant Managers.



*Is there a significant relationship between the eight leadership styles and job satisfaction, and does that relationship differ among casual, fast casual, and quick service restaurant managers?*

Multiple regression conducted on all managers indicated that there is not a significant relationship between job satisfaction and leadership styles,  $p = .39$  and  $R^2 = .15$ . While none of the leadership styles were significantly related to job satisfaction, the role of mentor had the strongest relationship.

Separate multiple regression tests were conducted for each restaurant type. For quick service managers, a significant relationship was found between job satisfaction and leadership styles,  $p = .04$  and  $R^2 = .79$ ; the styles of facilitator and mentor were positively and significantly related to job satisfaction. For fast casual managers, no significant relationship was found between job satisfaction and leadership styles,  $p = .13$  and  $R^2 = .63$ ; while none of the leadership styles were significantly related to job satisfaction, the role of director had the strongest relationship. For casual managers, no significant relationship was found between job satisfaction and leadership styles,  $p = .23$  and  $R^2 = .60$ ; while none of the leadership styles were significantly related to job satisfaction, the role of director had the strongest relationship, and it was negative.

*Is there a significant relationship between the eight leadership roles and tenure with the present employer or years of managerial experience?*

Multiple regression tests indicated a significant relationship between leadership styles and years of work with the present employer,  $p = .03$  and  $R^2 = .30$ ; the role of monitor was positively related to tenure with the present employer. Multiple regression tests indicated a significant relationship between leadership styles and years of management experience,  $p = .01$  and  $R^2 = .43$ ; the monitor and facilitator roles were positively related to years of management experience, while the roles of coordinator and innovator had a negative relationship.

## Discussion

Quinn suggests that the “better” or more effective managers are those that display a balanced range of leadership styles. In this study, fast casual managers had the lowest variance among scores on the eight leadership roles, and were above the average score of all managers on every leadership role. Casual managers were below the average on three of the eight leadership roles, and quick service managers were below the average on all eight leadership roles. Clearly, according to Quinn, the fast casual managers should be more effective than their counterparts in the casual and quick service restaurants, even though they have the least amount of foodservice and managerial experience. While their level of job satisfaction is not significantly different from casual or quick service managers, they report utilizing five of the eight leadership roles more than the other managers. The leadership role with the greatest reported difference between fast casual managers and other managers is that of broker. This role includes communicating with those outside the business to obtain financing or other resources, maintaining a positive public image and reputation, and being persuasive with outside constituents. Perhaps as the fast casual concept is relatively young, its managers were required to more often describe their business model and operations to potential employees, vendors, customers, and financiers. This operational concept may

also include more managers that are also owners or part owners, who it would seem would utilize the broker role more than a salaried non-owner manager. Or perhaps this may be explained as that as the fast casual concept developed and grew, it did so by attracting the better managers from other types of restaurants. It will be interesting to see if the fast casual managers continue to report greater usage of the leadership roles as the concept matures and employs a larger pool of managers.

Quick service managers report some interesting and conflicting information. They clearly are lowest in terms of utilization of the eight leadership roles. This would tend to indicate that these managers are not very effective. However, these managers have the longest employment with their current employer and reported the highest level of job satisfaction and the lowest level of intent to leave. Perhaps the quick service operation does not require as skilled or effective a manager as the casual or fast casual operations. For quick service managers, the leadership roles related to higher job satisfaction are facilitator and mentor. These roles are side by side on Quinn's model, and emphasis developing a cohesive team of employees who are encouraged to develop their skills and are given credit when it is due by an empathetic and approachable manager. It appears that the job satisfaction of the quick service manager is impacted more by people than policies, procedures, budgets, and bottom line results. Perhaps this is why their managers may be satisfied but not be viewed as effective as other manager.

Additional conclusions drawn from this study is that leadership style does not seem to be related to demographic characteristics. Neither gender, educational level, or age was found to be related to the type of leadership roles managers use. A strong relationship was also identified between job satisfaction and intent to turnover for the managers in this study,  $r = .71$  with  $p = .000$ . This supports previous studies that indicates that the more satisfied a worker is, the less likely they are to seek other employment.

The results of this study indicate that managers in different restaurant operations use different leadership roles, and that leadership roles are related to manager job satisfaction. Further research should be conducted to determine the cause of those different leadership styles and to determine if there is a relationship between a balanced leadership role style and manager effectiveness, as Quinn suggests, in the restaurant industry. This study was limited by the difficulty of categorizing restaurants into three categories. Clearly, some fast casual operations are closer to casual than others, while some are closer to quick service. As the fast casual concept continues to evolve, the lines used to separate it from other restaurant categories will likely become undistinguishable.

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## Chinese Hoteliers' Perspectives on Franchising

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### Abstract

The goal of this research is to examine the perspectives of China's domestic hotel operators regarding franchising, and to analyze a mix of factors that may affect such perspectives. Results from this study of 182 Chinese hotel general managers suggest that the length of work experience and educational background of Chinese hotel operators influence their franchise preferences. Hotel chains that have strong brand awareness and supportive centralized reservation systems, and offer high returns on investment at relatively low franchise fees, are most attractive to potential Chinese franchisees.

**Key Words:** Franchising; Hotel Brands; China hotel market; Hotel operator; Chinese state-owned hotels

### Introduction

Franchising has become globally one of the most rapidly growing business strategies. Rushmore (1997) found that over 65% of the U.S. hotel-room supply was franchised. However, in Europe and Asia, the franchise model is less popular. In China, although the hotel industry has developed rapidly since the 1980s, franchising has not been employed until recently. As franchising is becoming an increasingly effective tool for business expansion in China's many other industries, more and more hotel owners, executives, and potential investors are beginning to demonstrate a willingness to embrace the franchise concept. However, these industry practitioners' perspectives regarding franchising remain unknown. By conducting a survey among 182 general managers (GMs) of China's state-owned hotels, this study examines their perceptions regarding the concept of hotel franchising as well as the factors that might affect such perceptions.

### Franchising in China's Hotel Industry

Since 1978, to satisfy the nation's dramatic economic growth, the Chinese government has invested significantly in developing new hotels. However, Chinese hotel executives had been reluctant to accept the chain concept. By 2003, only 16 percent of Chinese hotels were chain operated, of which most were four- or five-star international brands. More noticeably, the global hotel chains have realized the highest occupancy, profit, and brand awareness (Little, 2004; Wang, 2002; Xiao, 1999). On the other hand, state-owned hotels, which accounted for 63.4% of China's hotel inventory by 2003 and compose the dominant group in the industry, are the least profitable in the market. The state ownership system is widely criticized as one of the major problems. As the state-owned hotels' GMs are appointed by the Chinese government (which might be national, provincial, or regional), they generally play a dual role in the hotels: the manager and the representative of the owner (government). The failure to separate management and ownership has significantly reduced effectiveness in hotel operations (e.g., Pine, 2002; Wu, 2001; Xiao, 1999; Yao, 2002). Chinese hotels are currently experiencing a significant shift of ownership, capital, and market restructurings. First, as the government has gradually realized the fatal disadvantage of the state ownership, more and more previously state-owned hotels have been or are being reformed to joint-stock ownership through selling a certain percentage of hotel stock to outside investors (Xiao, Xiao, & Wang, 2003; Yao, 2002). In addition, the industry is aggressively exploring additional capital sources, such as the private capital market (Dai, 2003; Wu, 2001). Furthermore, the saturating upscale hotel markets in China's gateway cities are pushing both global and domestic hotel chains to expand into smaller cities with lower-priced products (Wang, 2002).

Franchising had remained an unknown concept in China until the 1990s, and the hotel industry accepted the franchising concept even later than the other industries. Due to the lack of domestic human resources, joint-ventures associated with management contracts were the most encouraged business models by the Chinese government to import international operational standards and management expertise (Pine, Zhang, & Qi, 2000; Xiao, 1999). At the end of the last century, as more domestic management staff and private capital became available, many hotel chains began to promote the franchise model. For example, Jin Jiang Inn, a budget brand launched by China's largest domestic hotel chain Jin Jiang International, had evolved its ownership strategy and attracted 21 franchisees within three months after it announced its new franchise program in 2003 (Fen, 2003).



### **Benefits and Concerns**

A large body of literature examines a number of advantages that are attractive from a franchisee's point of view. Since an established brand provides an instant quality identity, recognition, and image, brand name is regarded one of the most important benefits that encourage independent hotels to engage in franchising (Rushmore & Baum, 2001). In addition, operating systems (including policies, procedures, and standards), reservation systems, and marketing programs are key technologies that could enable a franchised hotel to stand out from its competitors (Khan, 1991; Rushmore & Baum, 2001). Moreover, franchising could significantly smooth the complicated opening process of a hotel (Khan, 1991). Furthermore, it is also revealed that various factors may affect a potential franchisee's decision on: first, whether to choose the franchise model; second, if deciding to employ a franchise, which brand to choose. In addition to brand name, from the viewpoint of a franchisee, franchisee fee and return on investment are among the most important factors (Rushmore & Baum, 2001). In addition, compared with independent operation, lack of operational freedom is regarded as a major disadvantage of franchising. Reflected by the operational requirements and the duration of the franchise term, flexibility becomes a major concern of potential franchisees (Khan, 1991). Although literature has proposed many benefits for franchisees purchasing a franchise as well as concerns of franchisees in choosing a franchisor, most previous studies were just general descriptions, and no research with a systematic design, primary data, and qualitative analysis has focused on the topic of franchising in China's hotel industry. Consequently, views held by China's hotel practitioners truly remain unexplored.

### **Hypotheses**

Several factors are suggested to potentially affect the hotel operators' such perceptions. First, previous research has established the link between top managers' demographics and their strategic perceptions. Hambrick and Mason (1984) suggested that executives' educations, tenure, and other personal attributes influence their strategic thinking. Second, researchers have revealed that the operating model, i.e., franchise or management contract, is associated with the hotel quality level, which could be measured by AAA's diamond rating, Mobil's star rating, or similar scales (Xu, 2004). Dev et al (2002) revealed that the likelihood of choosing a management contract over a franchising arrangement increases when quality as a competence for the hotel rises. Moreover, it is recognized that most brands specialize in their respective quality level and few brands exist in more than two different quality levels. Because hotel GMs typically have considerable experience in their hotels' specific quality markets, it is expected that the GMs are more familiar to the brands competing at the same or close quality level than the ones at different quality levels. Therefore, we propose the following hypotheses:

- H1: China's hotel operators' preference regarding hotel operating model is affected by their (a) educational background and (b) tenure in the hotel industry.
- H2: China's hotel operators' preference regarding brand with which to franchise, if they were to purchase a franchise, is affected by their (a) educational background and (b) tenure in the hotel industry.
- H3: China's hotel operators' preference regarding hotel operating model is affected by their hotel's quality level.
- H4: China's hotel operators' preference regarding brand with which to franchise, if they were to purchase a franchise, is affected by their hotel's quality level.

### **Methodology**

A questionnaire was developed to answer the following four questions: (1) What is the respondents' most preferred hotel operating model? (2) If the respondents would consider purchasing a franchise, what are the most desirable brands? (3) Among the factors discussed in the previous section, what are the most important concerns in choosing a franchisor and what are the most valued benefits for franchisees? (4) How do the factors proposed in the hypotheses affect the respondents' answers regarding the previous three questions? Due to the fact that the state-owned-hotels are the dominant segment in China's hotel industry and are considered to be among the most likely future franchisee candidates (e.g., Wu, 2001; Xiao, et al, 2003; Yao, 2002), we believe focused research regarding this group of hotels/managers could help to reveal China's domestic hotel operators perceptions towards the concept of franchising. The questionnaire was pre-tested on a sample of 34 Chinese hotel GMs, and then was modified and a total number of 450 copies were distributed to the members of China Hotels Association. A follow-up reminder with a copy of the original questionnaire was faxed to the non-respondents after two weeks. Among the 206 questionnaires returned, 182 were useable, resulting in a 40.4 percent response rate. To reduce the non-response bias, ten GMs who did not return the questionnaires were contacted via phone and a short survey was completed by those ten GMs. The data were analyzed with descriptive statistics and Chi-square analysis. (The measurements and demographic statistics are available upon request.)

### **Descriptive Statistics**

Among the 182 GMs, 49.5% indicated that if they could choose an operating model for their hotels, they would prefer to buy a franchise and then manage it themselves. Only 24.2% and 26.4% of the respondents chose independent operation and management contract, respectively. Eight international and two domestic hotel chains were named by the respondents as the favorite franchisors (See Table 1). InterContinental, the parent company of the hotel brand Holiday Inn,

was chosen by 90.8% of the respondents, of which 30.8% picked it as the number one favored franchisor. Jin Jiang, China's biggest domestic hotel chain, gained over half of respondents' support (52.2%), and was selected by 26.4% as their first pick. Hilton International and Marriott International achieved similar overall brand awareness among the respondents (49.5% and 48.4%, respectively). Starwood (37.4%), Cendant (32.7%), and another domestic China firm, Capital Hotels (33.0%) were also considerably desirable, while Hyatt, Accor, and Best Western were only occasionally mentioned.

Table 1  
Respondents' Favorite Franchisors

	<u>Favorite Franchisor</u>		<u>One of the Favorite Franchisors</u>	
	Frequency	Percent	Frequency	Percent
InterContinental	56	30.8%	165	90.8%
Jin Jiang International	48	26.4%	95	52.2%
Marriott International	30	16.5%	88	48.4%
Hilton International	24	13.3%	90	49.5%
Capital Hotels	12	6.6%	65	35.7%
Starwood	4	2.2%	68	37.4%
Best Western	4	2.2%	8	4.4%
Hyatt	2	1.1%	9	4.9%
Cendant	2	1.1%	60	33.0%
Accor	0	0.0%	13	7.1%
Total	182	100.0	----	----

Note: N = 182. All respondents chose more than one favored brand.

The ranks of the respondents' concerns in choosing a franchisor are shown in Table 2. Brand name, franchise fee and return on investment were the top three concerns, while length of term and operational requirements were less serious concerns expressed by the GMs. Table 3 represents the most recognized benefits of buying a hotel franchise. Reservation system was the most attractive factor according to respondents, among whom 57.1% agreed that it is extremely important. Brand name also obtained strong emphasis as 49.5% of the respondents thought it is extremely important. Comparably, the importance of operating system, marketing and promotion support, and support in opening a hotel were less valued.

Table 2  
Most Important Concerns in Choosing a Franchisor

<b>Concerns</b>	<b>Mean</b>	<b>Std. Dev.</b>
Franchise Fee	2.30	1.140
Brand Name	2.41	1.085
Return on Investment	2.49	1.377
Operational Requirements	3.68	1.255
Length of the Franchise Term	4.00	1.274

Note: N = 182, 1 = extremely important concern, 5 = not an important concern.

Table 3  
Most Recognized Benefits of Franchising

<b>Benefits</b>	<b>Mean</b>	<b>Std. Dev.</b>
Reservation system	4.42	.746
Brand name	4.33	.746
Operating system	3.84	.969
Marketing and promotion support	3.70	1.016
Support in opening a hotel	3.53	.821

Note: N=182, 1 = not valuable, 5 = extremely valuable.

### Hypotheses Testing

Hypothesis-1a was supported by the data. Respondents' education level has a significant effect on their preference regarding hotel operating model (Chi-square = 19.956,  $p < 0.05$ ). Among the GMs who do not have a bachelor's degree, 61.6% prefer non-franchising operations, whereas 59.3% of the college graduates favor franchising as the operating model. Hypothesis-1b was only marginally supported. The GMs' preference regarding whether to purchase a franchise is

marginally affected by their tenure in the hotel industry (Chi-square = 3.366,  $p < 0.10$ ). More respondents with fewer than ten years hotel experience prefer franchising (56.9%), while more respondents who have worked over ten years in the industry prefer management contract and independent operation (62.5%).

Hypothesis-2a was not supported. The GMs' preferred franchise brands are not significantly affected by their education levels (Chi-square = 7.614,  $p > 0.10$ ). Hypothesis-2b was only marginally supported. Respondents' tenure in the industry has a marginally significant effect on their favorite franchise brands (Chi-square = 14.791,  $p < 0.10$ ). Among the respondents with fewer than ten years hotel experience, 37.2% prefer to purchase a Holiday Inn franchise while only 15.6% chose Jin Jiang as their most favorite franchise brand. Comparably, 40.0% of the GMs with more than ten years hotel experience selected Jin Jiang, while only 22.5% named Holiday Inn as their first franchise choice.

Hypothesis-3 and Hypothesis-4 were supported by the data. Respondents' preference regarding hotel operating model is affected by their current hotels' quality level (Chi-square = 15.838,  $p < 0.05$ ). 62.5%, 41.1%, and 50.0% of GMs of 3-star, 2-star, and 1-star hotels, respectively, would prefer to purchase a franchise while only 23.5% of 4-star hotel managers and none of the 5-star hotel GMs would like to do so. Moreover, a hotel's quality level significantly affects its GM's preference regarding the favorite franchise brand (Chi-square = 67.274,  $p < 0.01$ ). Marriott International (60.0%) is the favorite, followed by Hilton International (20.0%) and Starwood (20.0%), among the 5-star hotels' GMs, while Holiday Inn is most desirable by the GMs of 4-star hotels (64.7%). For the operators of 3-star hotels, domestic brand Jin Jiang is most favored (39.6%), followed by Holiday Inn (22.9%), Hilton International (16.7%), and Marriott International (12.5%). In addition, a total of 38.1% of the 2- and 1-star hotels' GMs would like to purchase a Holiday Inn franchise.

## Discussion

### *Operating Model Preference*

This study indicates that China's hotel GMs are very interested in franchising in that franchising is a more favorable operating model to them than either management contract or independent operation. As indicated in this study, a relatively high percentage of Chinese hotel operators believe that operating system is comparatively not as critical as having a brand name and a centralized reservation system. This finding proves a popular, although arguable opinion that China has accumulated an adequate number of qualified domestic managers who have mastered hotel operational skills (e.g., Xiao 1999). Such confidence in hotel operations consequently may make the management contract model less attractive than 20 years ago. As competition exceeds operational standards to become the major concern of the industry, branded hotels show competitive advantage over independent ones because they have not only well-known brand names, but also centralized reservation systems that generate guests from all over the world (Pine, 2000; Xiao, 1999). Therefore, while the management contract model is a less valuable one and independent operation is not competitive, franchising becomes a reasonable alternative.

### *Franchise Knowledge and Concerns*

China's domestic hotel operators have shown considerable knowledge regarding franchising. Their self-assessment can be further disclosed when we look at the factors of concern in franchise selection. The confidence in operation is demonstrated again as benefits including support in opening a hotel are not considered to be very valuable. Comparatively, brand name is widely recognized as one of the most valuable benefits of franchising and therefore is one of the most important factors when choosing a franchisor. Similarly, it is understandable that financial costs such as franchise fee and return of a franchise are important issues. Moreover, operational requirements and length of a franchise term are not regarded as critical concerns, which indicate that China's hotel operators put more value on profit than on the flexibility. On the other hand, the hotel operators' limited knowledge regarding franchising is revealed as well. For example, the surveyed hotel operators show preference to Hilton International, while apparently most are not aware that Hilton International is only a management company and does not sell franchises.

### *Factors Affecting the Franchising Preference*

This study reveals that education background, industry tenure, and current hotel's quality level may influence China's domestic hotel operators' preferences regarding franchising in various ways. First, education background affects the hotel operators' preferred operating model. Although it is difficult to explain why more-educated hotel GMs prefer franchising while less-educated ones tend to favor traditional non-franchised operations, the relatively low percentage of college graduates in China may partially explain this finding. In the past, due to the extreme difficulty of individuals obtaining higher education, Chinese college graduates were generally considered to be the most intelligent people, with the greatest opportunities for professional success and possessing the most forward-thinking attitudes. Therefore it is understandable that this group of people has more knowledge and vision (e.g., Wu, 2001; Xiao, 1999). Because franchising is a relatively newer concept than management contracts and independent operations, more educated people may have more

knowledge regarding franchising than do less educated ones. Therefore, it is important for the hotel chains desiring to expand their brands in China to first improve the industry's understanding regarding franchising. Second, industry tenure remains a question mark regarding its effect on China's hotel operators' franchising preferences. Although it is implied that the GMs with fewer than ten years of hotel experience tend to favor franchising as the operating model and are more likely to choose an international brand to franchise, the magnitudes of the statistics are not strong enough to draw conclusions on such relationships and more research is needed to further explore the effect of industry tenure on franchising preference. Third, the level of work experience may have been revealed through the quality level of the operators' current hotels. It is recognized that the management contract model is the most effective operating model to maintain quality and consistency and therefore is most preferred by luxury hotel chains. For example, all Four Seasons and Ritz-Carlton hotels are managed by the respective brand owners. Such notion is therefore reflected by the perspectives of China's hotel operators of luxury hotels. While most operators of the lower quality hotels (i.e., 3-, 2-, and 1-star) tend to favor franchising as the operating model, very few GMs of 4- and 5-star hotels indicated they would like to acquire a franchise. Similarly, when considering the preferred brands with which to franchise, the operators of the higher quality hotels would more likely consider Marriott International, Hilton International, and Starwood, while Holiday Inn and Jin Jiang are most favored by the operators of lower quality hotels.

### Conclusions and Limitations

In conclusion, this study suggests that, from the perspectives of China's domestic hotel GMs, China is prepared to apply franchising in the hotel industry. China's domestic hotel operators have shown considerable knowledge and interest in franchising, and such knowledge and interest may be affected by their educational background and industry experience (i.e., tenure and quality of hotels). The global hotel firms that have succeeded in managing Chinese hotels and have built their brand images in China will have significant competitive advantage in selling franchises. Particularly, a franchisor that has a strong brand name and a supportive centralized reservation system, and offers high return on investment at a relatively low franchise fee will be most attractive to potential Chinese franchisees.

To our knowledge, this is the first quantitative research focusing on China's domestic hotel operators' perspectives towards the concept of franchising. As a preliminary study on hotel franchising in China, several important limitations should be noted. As previously indicated, the sample of this study only consists of China's state-owned hotels' GMs, while many other stakeholders, such as investors and lenders, are all critical to the development of a franchise market. Moreover, although state-owned hotels are the majority of China's hotel supply, independent properties with other ownership types, such as public-owned and private-owned hotels, are also potential franchisee candidates. Therefore, the results of this study should be applied with caution. The investors and other types of hotel owners may have different perspectives regarding hotel franchising than the GMs examined in this study. A future study analyzing the major concerns of investors and other types of owners, and then combining the results with this study's findings, could provide a more accurate and complete picture reflecting the perceptions of China's hotel industry regarding the concept of franchising.

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## Value Creation: The Impact of Strategic Alliance on Customer Loyalty

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### Abstract

The most essential theory of loyalty marketing is that a small increase in loyal customers can bring a significant increase in profitability to a business. Recently, businesses around various industries have turned single-brand loyalty programs into corporate-wide loyalty programs across different brands. The purpose of the study was to examine the effect of strategic alliance on customer loyalty in the hotel industry. While it was found that there is a positive relation between strategic alliance and customer loyalty, value creation factors from strategic alliance is only one element in decisions of loyal customers. Managerial implications, limitations, and recommendations were discussed.

Key Words: Customer loyalty, strategic alliance, loyalty programs

### Introduction

Loyalty programs have now become so common in the hospitality industry that it is almost too hard to find a business that does not occupy such a program. It is known that loyal customers make more purchases than non-loyal customers do, and they are less likely to switch to a competitor brand just because of price and other special promotions (Shoemaker & Lewis, 1999). Recently, businesses around various industries have turned single-brand loyalty programs into corporate-wide loyalty programs across different brands in order to acquire the high external service by partnering with other businesses (Spethmann, 2005). For example, hotels are partnering with other airlines, rental cars, restaurants, and even credit card companies and offering loyalty customers more opportunities to earn points and benefits. Researchers claim that loyalty is built through a positive differentiation that is usually obtained by providing superior customer service (Javalgi & Moberg, 1997). This positive differentiation can be noted as value creation. Value creation strategies increase the long-term value of the relationship between a service firm and the customer by offering customized service and greater benefits and it may very well be necessary to influence customer satisfaction and their switching loyalty decisions (Shoemaker & Lewis, 1999).

It becomes essential for the hotel industry to explore the concepts that underlie in strategic alliances of loyalty programs to assess business strategies as a source of competitive advantage. The purpose of this paper is to determine the strategic alliance effect on loyalty customers. This study will add to the limited but growing body of related empirical research. In fact, this is the first empirical study that attempts to investigate the correlation between strategic alliance and loyalty programs in the hotel industry. Results of the study will provide insights on these two important issues.

### Literature Review

#### *Loyalty marketing and value creation*

Loyalty marketing has become a key factor for success in the service industry. In such a highly competitive market, service providers in many industries have discovered the importance of customer retention (Shoemaker & Lewis, 1999). They recognize the fact that keeping their customers is just as important as creating them. Numerous studies emphasize the value of repeat patronage of customers to be significant. Existing patrons tend to visit the property more frequently and as the number of visits increase, their purchase amount may increase over time as well. They also bring in new customers through positive word-of-mouth which can sometimes save a huge amount of the expenses for advertising (Haywood, 1988). Petrick (2004) explained that while repeat visitation or repeat purchase infer loyalty, it is well perceived that true loyalty is a two dimensional concept including both a psychological attachment and emotional commitment. Other researchers describe loyalty as the extent to which a customer patronizes the service provider and desires to continue an ongoing relationship with that service provider (McAlexander, Kim, & Roberts, 2003).

Bowen and Chen (2001) stated that there are three distinctive approaches to measure loyalty in general: behavioral measurements; attitudinal measurements; and composite measurements. The behavioral measurement implies repetitious purchase behavior that is consistent. Attitudinal measurements are considered as the sense of loyalty, engagement, and allegiance. Composite measurements of loyalty combine both the behavioral measurement and the attitudinal measurement.

It approaches to measure loyalty by indicators such as customers' preference of product, frequency of purchase, recency of purchase, total amount of purchase, and propensity of switching brands. Other researchers suggest repeat purchase, preference, commitment, retention, and allegiance as major loyalty indicators (Rundle-Thiele & Mackay, 2001). Other studies cited that emotional attachment, trust, and commitment are some important indicators for customer loyalty (Morgan & Hunt, 1994 ; Bowen & Shoemaker, 2003).

Many studies accentuated the importance of satisfaction in customer loyalty. McAlexander et al (2003) emphasized the need to provide and improve customer satisfaction to achieve loyalty. They concluded that the management of satisfaction is most useful for developing loyalty among customers that are not persuaded toward establishing enduring relationships with a certain brand. Lam, Shanker, Erramilli, and Murthy (2004) also contended customer satisfaction as one of the potential antecedents in building customer loyalty. Customer satisfaction influences variables that are indicators of customer loyalty or orientation toward a long-term relationship. They also suggested that there are increasing returns to scale in the relationship between customer satisfaction and customer loyalty.

Shoemaker and Lewis (1999) suggested the Loyalty Triangle, a framework which creates long-term loyalty. The Loyalty Triangle proposes companies to execute all the functions described on each side of the triangle equally well in order to build customer loyalty. The functions described are process, database management/communication, and value creation. The database management / communication function focuses on how the service provider communicates with its customers. Value creation includes value-added and value-recovery. Value-added strategies focus on the long-term value of the relationship between the customer and the service firm, and value-recovery strategies on the service delivery occurring in specific transactions. These two strategies are designed particularly to improve customer perceptions of the rewards and costs associated with service transactions and therefore increase customer satisfaction. The arrangements of value-added and value-recovery strategies may be one of the key factors that influence customers' loyalty decisions.

#### *Strategic alliance and its developments in the hotel industry*

Alliances are relationships between two or more independent parties that agree to cooperate but still maintain their own identities (Dev & Klein, 1993). Alliances are also known as partnerships and vary in the form that they take and they can fall into different categories such as operational, relationship, and strategic. Although the types of alliance might differ, the basic concepts which underlie within alliances are the same in that companies collaborate together to cooperate and fulfill their individual needs. Generally, strategic alliances help create new value (Kaplan & Hurd, 2002).

Strategic alliances are considered as collaborative efforts between companies to pool their joint resources to achieve mutually compatible goals (Lambe, Spekman, & Hunt, 1995). Resources here mean any tangible or intangible entities available to the firm which enables it to produce competence and compete in its marketplace (Hunt & Morgan, 1995). Firm resources are notably heterogeneous and imperfectly mobile. Barney (1991) stated that when heterogeneous resources are valuable, rare, durable, and inimitable, companies are able to attain competitive advantages because it will produce products with higher value for its customers than its competitors. Therefore, companies develop strategic alliances to achieve the resources needed to increase and sustain competitive advantage (Lambe et al., 2002). That is, strategic alliances can be regarded as a potential source of value creation as partnering firms use each other's strengths to boost market opportunities (Chathoth & Olsen, 2003).

### **Methodology**

#### *Research hypotheses*

The findings of the literature review suggest a positive relationship between strategic alliance and customer loyalty. Following hypotheses were advanced for the purpose of this study:

- H1: There is a positive relation between value creation from strategic alliance and repeat purchase intention.
- H2: There is a positive relation between value creation from strategic alliance and retention.
- H3: There is a positive relation between value creation from strategic alliance and prevention of brand-switching.
- H4: There is a positive relation between value creation from strategic alliance and preference.
- H5: There is a positive relation between value creation from strategic alliance and sense of loyalty.
- H6: There is a positive relation between value creation from strategic alliance and customer satisfaction.

#### *Measurement development*

The initial instrument was first developed after reviewing the existing literature with some modifications introduced. For instance, the questionnaire chose the six value creation factors to categorize the benefits to different sources as noted in the study by Shoemaker and Lewis (1999): financial, temporal, functional, experiential, emotional, and social.

Based on the existing research, repeat purchase intention, propensity of brand-switching, retention, preference, sense of loyalty (positive word-of-mouth), and satisfaction were chosen to measure loyalty. A five point Likert scale, with 1 being “very unimportant” to 5 “very important” was used to measure the hotel customers’ perception of the importance of benefits offered by its affiliated loyalty program. The impact of the benefits from partners on the loyalty determinants was also measured using items with five point Likert scale, with 1 being “strongly disagree” or “very unsatisfied” to 5 “strongly agree” or “very satisfied.” The final section was designed to provide the demographic profile of the respondents. A pilot test was conducted in order to establish content validity. Eighteen graduate students majoring in the hospitality administration at a major region of US voluntarily participated in the pilot test. Minor changes were made as a result.

#### *Sample and data collection*

The study selected the sample among customers who visited the hotel properties from October 6 to November 6, 2005. Four hundred copies of the questionnaire were sent out to three hotel properties. The three hotel properties were from one of the most famous hotel chains in the mid price segment located nearby the Las Vegas strip. The hotel properties distributed the questionnaires only to the customers who were engaged in their loyalty program. A copy of the questionnaire was placed in the guest’s room together with the hotel’s welcome letter. Participation for the study was absolutely voluntary and those customers who did decide to participate in the study were offered additional rewards points to their loyalty program as an incentive when they handed in their completed questionnaire at check out. A total of 216 were collected, out of which 18 were assumed invalid due to missing values and biased answers. Overall, the response rate was 49.5%.

#### *Reliability and assumption checks*

The reliability in this study was measured by the reliability analysis using SPSS 13.0. The Cronbach alpha values ranged from 0.802 to 0.857. All the variables had acceptable alpha values that were in fact excellent values very close to 1. The factor’s content validity was established through the rigorous process of developing the questionnaire and theoretical support from the literature review. All data were screened for outliers and scatter plots were reviewed of nonlinear distributions and relationships. Histograms and normal probability plots were examined for normal distribution in each performance as well. The independence assumption was checked to make sure that there is no relationship between the observations in the different groups and between the observations within the same group. Linearity was checked by producing all partial plots. The constant variance was verified by checking the plots with standardized residual as the Y variable and standardized predicted as the X variable (Norušis, 2004). Finally, analysis of variance inflation factors(VIF) was checked for multicollinearity. All the assumptions were checked and none of them were violated.

### **Results**

Approximately 60% of the customers who participated in this study stayed with the hotels’ affiliated loyalty program for more than 4 years (Table 1). More than 68% of the respondents were male and approximately 31% female. The majority of the respondents (62.6%) were in the age between 25 to 54 years old. Most respondents were either single (23.7) or married (66.7%). More than 88% of the respondents had either a college degree or a graduate degree. More than half of the respondent’s purpose of trip was business. Over 59% of the respondents had an approximate annual household income of over \$100,000.

Regression results were summarized in Table 2. The absolute value of the correlation coefficient between the value creation factors and repeat purchase intention is 0.451. From this regression model, 20.3% of the repeat purchase intention is explained by the value creation factors. The results indicate that the model was significant ( $p < 0.05$ ,  $F = 8.121$ ). Consequently, financial source ( $p < 0.05$ ,  $\beta = .244$ ,  $t = 2.751$ ) and temporal source ( $p < 0.05$ ,  $\beta = .213$ ,  $t = 2.179$ ) value creation items turned out to be significant. Thus, H1 was supported.

A significant result was detected between the value creation factors and retention ( $p < 0.05$ ,  $F = 8.362$ ). From this regression model, 20.8% of the customers’ intention to continue to stay with the hotels’ affiliated loyalty program is explained by the value creation factors. As a result, H2 was supported. Financial source was the only source that was significant ( $p < 0.05$ ,  $\beta = .179$ ,  $t = 2.024$ ).

Table 2 shows a positive relation between value creation from strategic alliance and prevention of brand-switching. Twelve percent of the customers’ propensity of brand switching was explained by the value creation factors. While H3 was supported, all the value creation items of each source, however, were not strongly influential to customers’ propensity of brand-switching when it was observed separately.

Results of regression analyses also indicate that there was a positive relation between the value creation factors and preference of brand. About 11% of the customers’ preference of the hotel brand is explained by the value creation factors. Only the functional source appeared to be significant ( $p < 0.05$ ,  $\beta = .229$ ,  $t = 2.237$ ). Therefore, H4 was supported.

The value creation factors and sense of loyalty (positive word-of-mouth) was found to be positively correlated. The regression model reports that approximately 17% of the customers’ sense of loyalty was explained by the value



creation factors. As a result, H5 was supported. The significance level of financial source ( $p < 0.05$ ,  $\beta = .175$ ,  $t = 1.933$ ) and experiential source ( $p < 0.05$ ,  $\beta = .206$ ,  $t = 1.964$ ) appeared to be significant.

Table 1  
Profile of Participants

Variable	Frequency	Percentage (%)
Length of stay with loyalty program*		
less than 4 years	63	31.8
more than 4 years	116	58.6
Gender*		
male	135	68.2
female	62	31.3
Age		
18 to 24	6	3
25 to 54	149	75.3
55 and over	43	21.7
Marital status*		
single	47	23.7
married	132	66.7
others	18	9.1
Highest education degree		
college	94	47.5
graduate	61	30.8
others	43	20.2
Purpose of trip		
business	107	54
leisure	78	39.4
both business and leisure	10	5.1
other	3	1.5
Annual household income*		
less than \$50,000	14	7.1
\$50,001 to \$100,000	58	29.3
over \$100,000	117	59.1

\* Percentages do not add up to 100% because of missing value.

Finally, Table 2 illustrates that the correlation coefficient between the value creation factors and satisfaction was 0.152 but the regression model was not significant. All the value creation items of each source were not found to influence customers' extent of satisfaction significantly. Thus, H6 was not supported.

Table 2  
Summary of Regression Analyses (N=198)

Variable	<i>B</i>	<i>Standard Error</i>	<i>R</i> <sup>2</sup>	<i>Sig.</i>
Repeat purchase intention	2.677	.287	.203	.000*
Retention	2.851	.262	.208	.000*
Propensity of brand-switching	1.993	.385	.120	.000*
Preference of brand	2.765	.392	.109	.001*
Positive word-of-mouth	2.514	.317	.167	.000*
Satisfaction	3.584	.377	.048	.152

Note. \* $p < .05$ .

### Discussions and implications

Empirical results from this study provide valuable findings for strategic alliance and loyalty programs in the hotel industry. It can be concluded that there is a positive relation between strategic alliance and customer loyalty, however, the results indicate that strategic alliance is not considered as the very decisive factor for customers to be loyal to a certain hotel brand. This can also be explained by the R square value of each multiple linear regression performance. Only 4.8% to

20.8% of the variability in observed strategic alliance value creation items is explained by loyalty decisions. There should be more factors that can be explained by customers' loyalty decisions. Previous studies proposed emotional attachment, trust, and commitment as some additional major features that build customer loyalty (Morgan & Hunt, 1994; Bowen & Shoemaker, 2003).

The findings of this research study would be able to assist hotel managers with practical ideas. The results of this study revealed that strategic alliance somehow affect loyal customers positively. Although the results of this study presume value creation items from strategic alliance are not the only conclusive factor in loyalty decisions, hotels can still take advantage of partnering with other companies in some way since they have a positive relationship between each other. However, it is more important to investigate from which value creation source or item the customers most likely perceive significant to their loyalty decisions. Moreover, other definitive requisites should always be performed simultaneously.

This study allows a service provider to identify the crucial value creation items in each loyalty decision used as a variable. By focusing on those attributes on specific customers' decision behavior, a service provider can develop practical strategies related to strategic alliance that offer attractive benefits to their customers. Hotels can build up strategies for different purposes by attracting customers with value creation items upon specific aspects. However, it is impossible for a hotel company to conclude that customer loyalty has increased by a single feature of all the various factors that affect loyalty decisions. The importance of each item varies among different customers so it is necessary for the service providers to pay attention to all of the factors depending on their particular needs.

Since the results of the study imply that value creation from strategic alliance is only one constituent in increasing customer loyalty, hotel managers should be alerted to the fact that just by having partnerships with other numerous companies is not what their customers are really expecting for. Some hotel companies try to attract customers by just adding more partnering companies. While it is necessary to continue engaging in strategic alliance partnerships, hotels should choose the right partner with the right benefits. Reward's availability is critical as well as the choice and customers are sensitive to the quality of value creation strategies of loyalty programs (Shoemaker & Lewis, 1999). It is more important for the hotel to partner with companies and be able to actually give those rewards and benefits.

## Conclusion

Strategic alliance has a positive impact on customer loyalty and it can be a competitive source to improve and sustain customer loyalty. Results of this study accurately points out that value creation factors from strategic alliance are only one element in influencing customers' loyalty decisions. Hotels need to constantly monitor the value creation drivers that can eventually enhance customer loyalty. Future research should incorporate more indicators to measure loyalty such as trust, commitment, proportion of visit, or time spent at the hotel property. More value creation items should be explored as well. One useful and important extension of this research would be to investigate the actual items that customers want or need. By doing so, hotels will be able to select the right partner and provide greater service. In addition, more hotel segments should be included as the study sample and data should be collected from more geographic locations.

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