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Proceedings of 2004 International CHRIE Conference

INTERNATIONAL
CHRIE
Council of Hotel, Restaurant,
and Institutional Educators
*The Hospitality &
Tourism Educators*



**Proceedings
of
2005 International CHRIE
Annual Conference**

**Las Vegas, Nevada, USA
July 27-31, 2005**



**Edited by
Hailin Qu, Ph.D.
School of Hotel and Restaurant Administration
Oklahoma State University**

Preface

This *Proceedings* features 77 refereed papers from a pool of 146 papers submitted from seven countries/regions for the 2005 Annual International CHRIE Conference held in Las Vegas, Nevada, USA, July 27-July 31, 2005. This year, a total of 219 papers were submitted for review (146 stand-up papers and 73 poster papers) and the total number of submissions increased more than 15% comparing with 2004. The Refereed Paper Review Committee completed 472 reviews in five weeks and more than 160 reviewers volunteered in the review process. Every paper was double blind reviewed and some papers were even triple-blind reviewed due to the conflicted results.

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 and excellent job, the *Proceedings* would not be possible. I would also like to thank the more than 160 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.

I would like to thank the School of Hotel and Restaurant Administration and the College of Human Environmental Sciences at Oklahoma State University for the support I received to take this major responsibility as the Chairman and Editor of this year's Refereed Paper Review Committee and the conference *Proceedings*. Without their support, I would not be able to provide the services to the I-CHRIE.

In addition, I would like to thank my graduate assistant, Ms. Hye Young (Helen) Park, who contributed many hours of hard work to format the *Proceedings*.

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.

In closing, it has been a privilege to serve as the Chairman of the International CHRIE Refereed Paper Review Committee for the past three years. The experience has been tremendous. I wish to thank the International CHRIE office as well as all the members of the International CHRIE for the support and encouragement you have given to me.

Congratulations and best wishes!



Hailin Qu, Ph.D.

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PERFORMANCE OF INDUCTION PANS ON INDUCTION COOKTOPS: ALL PANS ARE NOT CREATED EQUAL

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ABSTRACT

Induction cooktop use has increased recently, but cooktops are expensive. Additionally, their efficiency depends heavily on the choice of pan materials; the pans' magnetic properties and their resistance to the flow of electricity. This study evaluated eight types of induction pans for: time required to boil water, energy required to boil that water, and energy required for continuous use. Multilayer pans performed better than the cast iron pans for all tests with the aluminum pan with a ferrous core performing the best on the time to boil test.

Key Words: induction cooking, pans, performance, cooktops

INTRODUCTION

Over the past five years several trade journals have boasted the benefits of induction cooking (PG&E 2000; Doucette 1998; Durocher 2000; Friedland 1996; Nation's Restaurant News 1999; Perlik 2001). Energy efficiency is the most talked about advantage of induction. As compared to other cooking methods, induction is reported to be approximately 80-90% efficient, while gas, electric, and halogen methods range in efficiency from only 40 to 58% (Su *et al.* n.d.). Induction cooktops save energy because they "only draw power when a pan is on the ring" (Induced Energy Ltd. n.d.), thereby reducing the cost of running the hob (cooktop), eliminating all energy consumption if the hob is left on between uses. In addition, since the heat is generated in the pan, less heat is lost to the environment, helping to keep kitchens cooler and reducing the need for air conditioning.

The advantages of induction make it appealing to many, but an induction cooktop also has several drawbacks. For many years the price of induction cooktops and pans have made it cost prohibitive for many operations. However, in recent years, the cooktops and pans have come down in price, units now range from a several hundred dollars to several thousand dollars, and pans run anywhere from to seventy dollars to over a couple hundred dollars, depending on the manufacturer (Bendall 2000).

Induction cooking is a simple technology in which electricity moves through a coil located beneath the surface of the ceramic top. The alternating current moving through the coil creates a fluctuating magnetic field around the coil. When a conductor (the metal pan) is placed in that field, an electric current is generated in the conductor. When electric current passes through a conductor (the pan), if the resistance is high enough, then heat is generated. As a result, the pan gets hot and not the cooktop. Once the pan is removed from the unit, generation of the electric current immediately stops. Without the current moving through the pan, no heat is generated nor is electricity used by the cooktop (Zinn *et al.* 1988). The efficiency of a pan on an induction cooktop depends on the pan's materials; its magnetic properties and the resistance to the flow of electricity. Metal materials that have magnetic properties, such as iron, develop stronger electric currents. Materials with greater resistances generate more heat. Pans made from metal such as copper or aluminum develop weaker electric currents than iron and have relatively low resistances. As a result, they generate very little heat (Tudbury 1960). Because of the way induction cooktops work, pots and pans need to be made of ferrous metals such as iron or steel. One way to check to see if the pan is induction ready is to simply test it by placing a magnet on it to see if it sticks. If it sticks then the pan will likely work on the induction cooktop (Management Consulting Systems 2002). Because of the wide variety of pan options, consumers may not fully understand the importance of the different materials to the functionality of the pan, so poor choices may be made when selecting a pan. As a result, in spite of their reported advantages, induction cooktops may not perform properly due to the operator not using the correct pan.

Many manufacturers have used various metals either alone or layered with other metals to help spread the heat and create a more uniform temperature across the bottom of the pan's surface. One type of multi-layer pan is the "sandwich" style type of pan that uses a ferromagnetic metal to generate heat and another metal, like aluminum or copper, as a middle layer (heat spreader) to more evenly spread the heat. In addition, many pans have non-stick coatings. Depending on their composition, non-stick coatings on pans may help the spread of heat.

The predominant metals used for induction pans are; heavy gauge aluminum with a ferrous metal induction core, cast iron, 18/10 magnetic stainless steel with layers of aluminum, or a laminated alloy. Of all these types of metals, copper and aluminum are the best conductors of heat. Next in order is iron followed by stainless steel. Each type of metal has its own advantages and disadvantages, and they need to be examined before a pan is purchased (Consumer Reports 1998). Operators have found that multilayer pans tend to heat faster and have a more uniform heat distribution than single metal pans such as cast iron. (Doucette 1998). Each metal that makes up a multilayer pan performs a different function. Ferrous metals like iron that are magnetic are used primarily to generate the heat. Magnetic stainless steel also has the added benefit of providing a durable surface that helps extend the pans' useful life. Aluminum and copper are included to help spread the heat generated by the ferrous metals. Additionally, aluminum helps reduce the total weight of the pan.

Given the complexity of the heating process with different ferrous materials, it is not surprising that a wide variety of pans are marketed as induction compatible. They are generally sandwich pans made of cast iron or stainless steel with varying amounts of aluminum, copper, or other materials. These pans vary also in thickness, weight, bottom shape of the pan, and diameter (for example, small sauté pans may range from eight to nine inches among different manufacturers). In addition, some pans are coated with a non-stick surface material. Consumers may find it difficult to make appropriate pan choices for this relatively new and different cooking technology. The purpose of this study, therefore, was to evaluate the performance of eight different types of induction pans. With this information, consumers may make more informed choices and maximize efficiency of their induction cooktops.

METHODOLOGY

Eight-induction pans (three fry pans, three skillet pans, and two sauté pans) from four major manufacturers were tested on two different induction cooktops (1500 and 1800 watt). The two cooktops were used to generalize induction testing of pans so that results were not specific to one cooktop manufacturer. The pans were evaluated for time to boiling, energy usage, and temperature profile across the base of the pan. The pans varied by metal content, diameter, and coating. The metals used in the tested pans included heavy gauge aluminum with a ferrous core, porcelain-enameled cast iron, and magnetic stainless steel. Diameters of the pans ranged from 203.2 mm to 254 mm. To ensure reliability, each temperature setting, cooktop, and pan was tested twice. Pans, cooktops, and temperature settings' orders were randomized to help reduce possible bias. Each pan and cooktop was given a half hour time period to cool before a new test was performed.

In preparation for testing, all pans that had diameters of 228.6 mm or less were filled with 450 milliliters of tap water. The remaining pans having diameters of 241.3 mm or larger were filled with 750 milliliters of tap water. The two amounts of water added to each pan were selected to ensure at least half an inch of water in the pan. One-half an inch of water was selected for the depth because it allowed for boiling to occur in less than 10 minutes. Additionally, if the depth was less than half an inch, it would have been difficult to obtain water temperature readings. All the water used for each test was chilled and had to be at least 45°F (7°C), plus or minus 6°F (5°C). Once a pan was filled with the correct amount of water, it was centered on the cooktop and turned on. Electricity to power the cooktops passed through a 120 volt Brand Electronix Wattmeter before reaching the cooktop. The purpose of the wattmeter was to determine the power draw of the unit in watts (W) and the total energy consumed during the test in kilowatt-hours (kwh).

After the test was completed, the cooktop was turned off. The temperature of the water in the pan was then quickly taken using a k-type temperature sensor attached to a PICO-TC08, temperature data logger, which fed the reading directly to a computer. The temperature was taken within fifteen seconds of the cooktop being turned off.

The first test tracked the time to boil and the energy required to boil the water. The pans were evaluated for time to boiling on the highest temperature setting for each cooktop. The highest setting available on the cooktops did not list a temperature, however the temperatures were above 450°F (232.2°C) for the 1800 W cooktop and 410°F (210°C) for 1500 W cooktop. This test required two researchers, one to start the stopwatch and the other one to turn on the cooktop. Thereafter, every fifteen seconds one person would read the power draw from the wattmeter and the other would record the number. In addition to recording the power draw of the pan, the water's time to boil was also recorded. There were three stages to boiling that were identified and recorded; A) bubbles on the bottom of the pan, B) bubbles breaking the surface of the water, and C) a full rolling boil. To standardize data collection, researchers were trained prior to starting data

collection. The training included defining each stage of boiling, demonstrating each stage, and allowing the data collectors to practice under direct supervision of the lead researcher. Once data collection was complete, the energy required to boil was calculated from the power readings. Each power reading from the time the test started until the time the water reached a rolling boil was then converted to kilowatt-hours (watts were multiplied by 15 seconds, divided by 3600 seconds per hour, and finally divided by 1000 watts per kilowatt). To get the total energy required to boil the water, the energy used for each of the 15 second periods was summed.

The second test was to determine the energy consumption for a 10 minute period and the final temperature of the water in each pan. The energy usage and final water temperature for each pan were evaluated at two temperature settings; low, and medium. The low setting was a temperature of 130°F (54.4°C) for the 1800 W cooktop and 135°F (57.2°C) for the 1500 W cooktop. The medium setting for both cooktops was 200°F (93.3°C). The first step was to center the pan on the cooktop and set the temperature. The starting kwh reading was recorded and the power turned on. When a full boil was observed, the cooktop was turned off and the water temperature was immediately measured and recorded. If a full boil was not reached, the unit was left on for ten minutes. After ten minutes, the cooktop was turned off and the water temperature measured and recorded using the same procedure as for Test 1. In addition, the final kwh reading was recorded. The total energy consumed during the test was the difference between the final and initial kwh readings.

RESULTS

There was no significant difference at $\alpha = .05$ between cooktops for time to boil for the smaller pans (pans with a diameter of 228.6 mm or less). This was not totally unexpected, the cooktops varied in total wattage by only 300 watts. Even though there was no significant difference, all pans except Pan 1 tended to have shorter boiling times on the 1800 W cooktop. Because there was no significance difference, the data for the two cooktops were combined. When pan performance was evaluated, a significant difference existed between Pans 2 and 5. Pan 5 took significantly less time to bring the water to a boil than did Pan 2. While Pan 5 was not significantly faster in bringing the water to a boil than Pans 1, 3, and 4, a trend was found that indicated with more repetitions of the study, Pan 5 might have actually been the fastest to boil the water. Since the pans were similar in weight, there had to be another reason for the difference. That reason may have been related to the metal used to generate the heat. The metal used to generate the heat was magnetic or ferrous stainless steel in all pans except for Pan 5. Pan 5 used what was described as a ferrous core to generate the heat. A detailed description of the ferrous core was not available from the manufacturer, but may have been the reason for the shorter time to boil.

The results for time to boil for the larger pans (pans with diameters equal to or greater than 241.3 mm) did find a significant difference between the two cooktops. The size and weight of the pans is the most likely cause of this significant difference. The size and weight of the pans likely amplified the difference between the two cooktops. Pan 6 had a significantly shorter time to boil than Pans 7 and 8. Pans 7 and 8 are made of porcelain enameled cast iron. Both pans are significantly heavier than Pan 6, which is made of aluminum with a ferrous core. Because of the mass of the cast iron pans, it took more energy to raise the temperature of the pans to the point where it caused the water to boil. Because it took more energy, it took more time to generate the energy needed to make the water boil.

No significant difference was found between the total energy required to boil the water between the cooktops, nor was there any significant difference between the energy required to boil the water for the five small pans (Pans 1 through 5). This was expected since the five were filled with the same amount of water. The only remaining variable that affected the energy required to boil the water was the construction of the pans. Based on their weights and materials, it should have taken approximately the same amount of energy to raise the metals' temperatures enough to boil the water. This is exactly what this test showed. For the larger pans, the aluminum with a ferrous core pan (Pan 6) required less energy than did the cast iron pans, the differences between all three pans were significant at $\alpha = .05$. Between cooktops, there was no significant difference. Both results were expected. It takes the same amount of energy to boil the water regardless of how fast it is heated, and the two cast iron pans weighed significantly more than the aluminum pan. As a result, more energy was required to raise the temperature of the heavier pans.

This test was performed at a low temperature of 130°F (54°C) for the 1800 W cooktop, and 135°F (57°C) for the 1500 W cooktop. The test was also performed at a medium temperature of 200°F (93°C) on the 1500 W cooktop. The 1800 W cooktop was not used for the medium setting because the water boiled making it unsuitable for comparison to the other results. The pans were left on the cooktops for 10 minutes then the final temperature and total energy used were recorded. The results for the small pans are shown in Table 1. The results for the large pans are shown in Table 2.

Since the materials, weights, and amount of water were similar for all small pans, the energy used and final temperature was also expected to be similar. This was true with one exception, Pan 1. Pan 1 used significantly more energy than all pans except Pan 4 on the 1800 W cooktop on the low setting. The final water temperature was significantly higher for Pan 1 on both cooktops. Pan 1 seemed to interact differently with the temperature control for the cooktops, particularly the 1800 W cooktop. When the cooktops were first turned on, the power draw was high until the pan reached the proper temperature, then it automatically decreased to maintain proper temperature. For Pan 1 the 1800 W cooktop stayed on full power longer than for the other pans. When the power was reduced to low, the water in Pan 1 had reached more than 170°F (77°C). As a result, the pan consumed more energy and the temperature after 10 minutes had only dropped to 136°F (58°C). The reason, why Pan 1 used more energy on the 1800 W cooktop merits further study. One final note about the small pans, the temperature settings for low were 130°F and 135°F (54°C and 57°C), but the temperature of the water was maintained at less than 120°F (49°C). Operators need to be aware that the temperature setting may not accurately reflect product temperature.

Table 1
Total Power Consumption and Temperature of Water on Low (130 or 135°F) and Medium (200°F) Temperature Setting for Pans With Diameters of 228.6mm or Less, Filled With 450ml of Water

Pan	Power Consumed on Low ¹			Power Consumed on Medium
	1800 W	1500 W	Average	1500 W
1	0.066 (0.002) _a	0.041 (0.007) _a	0.053 (0.015) _a	0.092 (0.0007) _a
2	0.037 (0.008) _b	0.038 (0.002) _a	0.037 (0.005) _b	0.098 (0.003) _a
3	0.044 (0.00) _b	0.038 (0.002) _a	0.041 (0.003) _{ab}	0.097 (0.003) _a
4	0.047 (0.003) _{ab}	0.039 (0.002) _a	0.043 (0.005) _{ab}	0.102 (0.002) _a
5	0.044 (0.002) _b	0.043 (0.004) _a	0.043 (0.002) _{ab}	0.103 (0.0007) _a
Pan	Temperature on Low ¹			Temperature on Medium
	1800 W	1500 W	Average	1500 W
1	136.75 (1.95) _a	118.55 (8.20) _a	127.65(11.57) _a	203.66 (2.34) _a
2	115.04 (0.09) _b	113.76 (0.47) _a	114.40 (0.78) _b	177.18 (1.66) _b
3	117.61 (1.97) _b	115.24 (1.95) _a	116.42 (2.10) _{ab}	173.22 (1.35) _b
4	116.53 (3.50) _b	114.34 (3.54) _a	115.43 (3.14) _b	173.0 (3.83) _b
5	117.54 (1.43) _b	117.81 (5.45) _a	117.67 (3.26) _{ab}	179.83 (0.58) _b

Note: Column numbers with the same subscript are not statistically different at $\alpha = .05$.

¹Power consumed was not significantly different between the two cooktops at $\alpha = .05$.

Table 2
Total Power Consumption and Temperature of Water on Low (130 or 135°F) and Medium (200°F) Temperature Setting for Pans With Diameters of 241.3mm or Larger and Filled With 750ml of Water

Pan	Power Consumed on Low ¹			Power Consumed on Medium
	1800 W	1500 W	Average	1500 W
6	0.065 (0.004) _b	0.069(0.007) _a	0.067 (0.003) _a	0.126 (0.002) _b
7	0.111 (0.004) _a	0.062(0.004) _a	0.086 (0.028) _a	0.147 (0.004) _a
8	0.096 (0.004) _a	0.060 (0.002) _a	0.078 (0.020) _a	0.137 (0.00) _{ab}
Pan	Temperature on Low ¹			Temperature on Medium
	1800 W	1500 W	Average	1500 W
6	115.90 (0.28) _b	124.82(1.92) _a	120.36 (5.27) _a	172.41 (2.84) _b
7	144.74 (3.19) _a	120.23(3.25) _a	132.48 (14.39) _a	194.09 (3.15) _a
8	134.68 (2.86) _a	116.53 (1.68) _a	125.61 (10.65) _a	179.62 (1.17) _b

Note: Column numbers with the same subscript are not statistically different at $\alpha = .05$.

¹Power consumed was not significantly different between the two cooktops at $\alpha = .05$.

For the larger pans, there were significant differences between the energy used by the different pans. For the 1800 W cooktop, the aluminum pan with a ferrous core required less energy, but also maintained a lower temperature. There are several possible reasons for the observed differences in the data. First, the cast iron pans (Pans 7 and 8) required more energy to bring to temperature because of their mass. Because the pans heated more slowly, the cooktop was on full power longer. Because the pan was on full power longer, it drew more energy. Second, after the cast iron pans got to temperature and the power was reduced, the water temperature was maintained longer. This is because the cast iron pans may have acted as a heat sink (something that stores heat), slowing down the cooling process. A similar pattern was not observed for the 1500 W cooktop. This could be due to the more gradual heating of the pans resulting in less overshoot (the cooktop staying on high power too long). Therefore, the advantages seen in the cast iron pans' ability to maintain temperature may have offset the increase in energy required to bring the pans to temperature.

CONCLUSION

As expected, the multilayered pans performed better than the single metal pans because they generally required less energy to bring water to a boil. There were basically two types of multilayered pans in the study; one was a combination of magnetic stainless steel and aluminum and the other was a heavy aluminum with a ferrous core. The ferrous core pan was significantly better than one of the stainless steel pans for the time to boil test, 213 seconds versus 262 seconds. While not statistically better than the other stainless steel multilayer pans, the ferrous core pan's time to boil was shorter than all other pans.

While the aluminum pan with the ferrous core had shorter times to boil, it required approximately the same amount of energy to bring the water to a boil as did the stainless steel multilayer pans. This was expected given the weight and material of the pans. In other words, it took about the same amount of energy to raise the temperature of each pan to the point where enough heat was transferred to the water to cause it to boil. As with the time to boil test, the cast iron pans performed significantly worse than the multilayer pans. Again, this was not unexpected since the pans were significantly heavier than the multilayer pans. The greater mass of the cast iron pans required more heat to raise the temperature of the pans to the point where enough heat was transferred to cause the water to boil. Overall, if the goal is to transfer as much heat into the product as fast as possible, then the aluminum pan with the ferrous core is the best pan to use followed by the multilayered stainless steel pans (based on the pans included in this study).

The test for total power consumed after being on for 10 minutes had one surprise, a stainless steel multilayered pan. When set on low (130°F), the temperature of the water spiked to more than 170°F (77°C) before the cooktop powered down to maintain the set temperature. As a result, the energy used by that pan was higher than any of the other small pans. The water temperature also remained significantly higher. After 10 minutes, the temperature had only dropped to 137°F (58°C). The reason for this behavior was not clear. What was particularly baffling was the fact that another pan was identical to this pan, except that it was not coated. It is not likely that the coating had that great of an impact on the results, therefore the two pans should have behaved similarly.

In summary, multilayer pans performed better than the cast iron pans for all tests. Exactly which multilayer pan was the best depended on the intended use. If the operator wanted to heat liquids as rapidly as possible, then the aluminum pan with a ferrous core is the best pan to use. On the other hand, if even heat is needed for sautéing or to prevent scorching, then the multilayer stainless steel pans are the pans of choice. Based on the results of this study, additional research on induction pans is warranted. That research should look to establish an exact temperature mapping of the bottom of the pans, as well as including additional pans and cooktops. It is also important to note that while cast iron performed the worst on the tests that were included in this study, that is not to say that it might not be the best pan for certain applications. Other factors such as cost may affect individual purchase decisions. Finally, additional tests should be conducted to see how the pans behave under the repeated loading that they are likely to experience under operational conditions.

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EXAMINING THE STRUCTURE OF ONLINE PLEASURE TRAVEL PLANNING

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ABSTRACT

Conspicuously absent in travel literature is a framework that explains online pleasure travel planning. Using multidimensional scaling, this study visually plotted travelers' responses as to when (first, early, middle or late) they visited websites during the travel planning process. Analysis of the visual plots suggest that the *level of uncertainty* (high and low) and the *type of information sought* (objective or subjective) are two underlying dimensions of online pleasure travel planning. Findings can be used in the design and development of online travel planning systems.

Key Words: travel planning, online travel information search, website typology.

INTRODUCTION

The Internet has a wide array of travel information sources to research and purchase travel products. From 12 million that planned travel online in 1997, the year 2004 saw an increase of up to 66 million online travel planners (TIA 2004). Travel planning in this context involves activities such as getting information on destinations, checking prices and schedules and making purchases. Travel planning typically involves a range of decisions and sub-decisions undertaken by a traveler so as ensure a satisfactory travel experience (Jeng and Fesenmaier, 2002). Notwithstanding the ubiquitous nature of travel planning on the Internet, travel literature is still void of a comprehensive framework that explains this complex phenomenon. The purpose of this paper is to examine the structure of online pleasure travel planning. Using multidimensional scaling, the study creates visual plots of *when* travelers accessed travel websites during the travel planning process. It then draws from theories in travel marketing and consumer behavior to interpret the dimensions derived.

REVIEW OF LITERATURE

Travel information search (TIS) itself is a multi-stage, contingent and dynamic process (Fesenmaier and Jeng, 2000) and is integral to travel planning. Fodness and Murray (1998) identified three underlying dimensions of travel information search, namely spatial, temporal, and operational. In travel planning, travelers engage in a complex process that involves the integration (Anderson 1981) and processing of information (Bettman 1979), as well as the execution of purchases (Fesenmaier and Jeng 2000). It is a complex phenomenon explained by a hierarchical structure with decisions and sub-decisions spread across layers (Fesenmaier and Jeng 2000). Fesenmaier and Jeng (2000) proposed that core, secondary, and en-route decision making were three layers of a hierarchical structure in pleasure travel decision-making. The core decision included sub-decisions specific to the primary destination, date/length of trip, travel party members, lodging accommodations, travel route and budget. As part of the secondary decision, travelers decided on secondary destinations, activities, and the identification of attractions. The third stage or en-route decision issues included rest stops, items to purchase, and food and restaurant stops. The hierarchical structure of planning can also be explained by uncertainty reduction theory (Bauer, 1960; Berger 1997). Planning is guided by uncertainty reduction theory, and is defined as "hierarchical cognitive representations of goal-directed action sequences", (Berger 1997, p. 25). Faced with uncertainty, consumers develop ways of reducing risk by searching for information that enables them to act with a degree of confidence in situations of uncertainty (Bauer, 1960).

In the online context, Pan (2000) evaluated the online TIS process (under the umbrella of travel planning) from the perspective of semantic mental models of tourists, and how these matched up with the actual travel information space (the space comprising the vast number of travel information sources on the Internet). While significantly different mindsets were evident in the search process, although the planning itself uncovered an underlying hierarchical structure of accommodation sites visited first followed by destination sites etc.

The Internet is commonly referred to as a computer-mediated environment is a link between a "sponsor" (e.g., a seller) and "users" (e.g., a traveler) that involves information technology, feedback (i.e., interactivity) and customization (Winer et al. 1997; pp 288). Specific to search on the Internet, Hoffman and Novak (1996) proposed that the online search process is largely comprised of goal-directed and experiential search modes. In goal-directed behavior, consumers are instrumental in approach, and utilitarian in the process. Experiential behavior is characterized more by behavior when no specific task has to be completed based on enduring involvement and hedonic benefits. This draws from the dimensions of

consumption-related evaluations, namely utilitarian and hedonic (Hirschman and Holbrook 1982; Babin, Darden and Griffin 1994). In the travel context, Vogt and Fesenmaier (1998) stretched the functional information search framework to include experiential components, namely sign, hedonic, innovation, and aesthetic needs. These were structured around travel information sources that were categorized as social, personal, marketing, and editorial. Applied in a travel specific context, travelers are seeking information not only for making a better decision, but also for the enjoyment of information search itself (Bloch, Sherrell, and Ridgway 1986).

After Hoffman and Novak (1996), other search typologies have been suggested for the online environment. Dholakia and Bagozzi (2001) proposed the Mindset Formation and Influence (MSFI) model that suggested deliberative and implemental mindsets as goal-oriented, and exploratory and hedonic mindsets as experiential. Another categorization was from Moe (2003), who contended that online search strategies are dependent on the purchasing horizon and search behaviors. In fact Moe's model was the first to categorize search based on a timeline with early and late serving as two periods of the search process.

DATA AND METHODOLOGY

The data used for the study came from a November 2001 survey conducted by the Canadian Tourism Commission. The survey was conducted in both the U.S. and Canada primarily to evaluate online travel purchase behavior. Responses were collected on the Internet using a survey of 2,495 North Americans. The sample comprised 1,334 from the USA and 1161 cases from Canada.

The primary measures were picked from a pool of 19 questions that sought responses as to *when* respondents visited a particular type of website during the travel planning process. The questions were measured using an ordinal scale with first, early, middle, and late serving as the four points on the scale. Eventually, 13 questions (with each pertaining to one specific type of website/information source) were picked from the pool based on two conditions; the first being if the website type played an important role in the online travel planning process based on trade press literature. The second condition was if there was a possibility of overlap in responses by respondents with any other website in question. The thirteen websites that qualified were those of airlines, accommodations, destinations, CVBs (convention and visitor bureaus), local travel companies, maps, travel magazines, travel guides, search engines, portals, online agencies, and weather.

Since all respondents did not visit all the Websites, conditional probabilities were used to estimate when respondents may have visited information sources. Prior precedence of such a procedure is present in Fodness and Murray (1998) who used conditional probabilities in place of missing values to develop perceptual maps of travel information search. In this study, a Markov Chain Monte Carlo (MCMC) simulation was administered using the Proc MI procedure in SAS V8.2. Probabilistic values were obtained by a draw from the "predictive distribution" of the variable, and are drawn from estimated mean and variance values of the existing distribution. The resultant data with conditional probabilities produced an identical distribution with distances between variables being the same as originally reported in the data. Non-metric multidimensional scaling was used to visually plot traveler responses as to when they visited websites (first, early, middle, late). Multidimensional scaling (MDS) is a statistical technique that provides a visual representation of the pattern of proximities (i.e., similarities or distances) among a set of objects (Hair et al. 1998). From the visual map, dimensions can be interpreted or confirmed if it was proposed a priori (Hair et al. 1998). The ALSCAL program in SPSS was used to analyze the data.

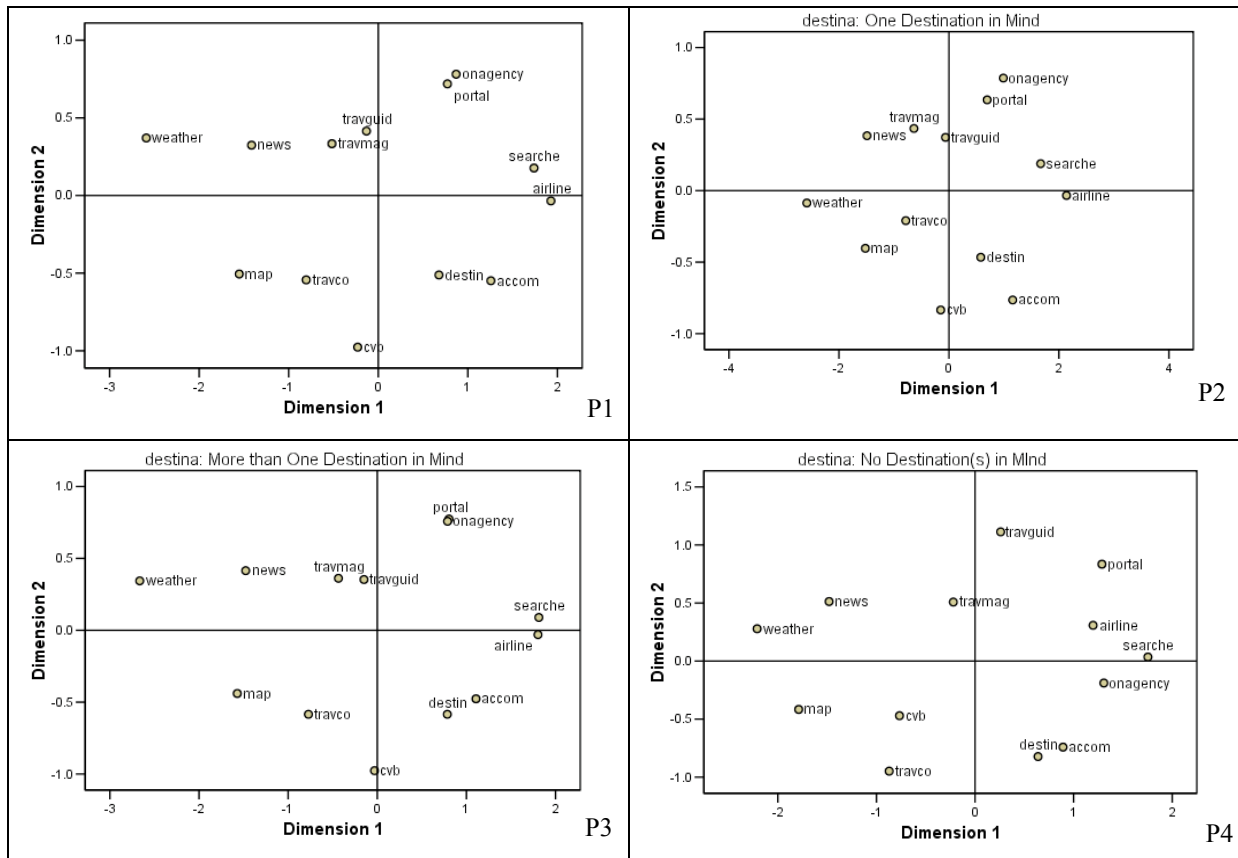
RESULTS AND DISCUSSION

In the first run of MDS (with no conditions attached), analysis of the measures of fit associated with MDS demonstrated a two-dimensional solution as the best fit for the data. In MDS, stress values combined with model variance (R^2) are used to determine model fit (Kruskal and Wish, 1978). Stress values between 0.1 and 0.2 are fair, and those between 0 and 0.1 are considered good (Kruskal and Wish, 1978). Additionally, an R^2 above 0.90 is considered an excellent fit of the model. When no conditions were included, MDS analysis showed that stress values improved from 0.15 (fair) to 0.07 (good) from a one-dimensional solution to a two-dimensional solution respectively. However, R^2 values increased only marginally from 0.92 to 0.97 between the one dimensional and two-dimensional fits. Subsequent to validation where no conditions were stipulated, MDS analysis was done based on three separate conditions based on the number of destinations in mind prior to engaging in search. One destination in mind (P2), more than one destination in mind (P3), and no destination in mind (P4) served as the three conditions.

Plot P1 in Figure 1 depicts the visual plot of similarities/dissimilarities of MDS analysis with no conditions

attached. Interpretation of MDS dimensions is often a subjective assessment of the researcher, but should be based on strong theoretical underpinnings (Hair et al., 1998). Common groupings of data points are first identified, and thereafter the relative positioning of groupings are used to interpret dimensions. Dimension 1 along the X axis reflects the sequence of when travelers visited websites. For instance, at the right end of the map are airlines, search engines and accommodations, and on the left end are weather and map websites. In the center along the horizontal axis are those websites visited during the early to middle stages of travel information search. Given that travel planning is a hierarchical process Dimension 1 was named as the “*level of uncertainty*” with “high” and “low” signifying the two ends of the dimension. Early in the planning process, travelers seek to eliminate uncertainty and complete tasks aimed at ascertaining core elements of travel such as transportation and accommodations. P1 illustrates (from right to left), the uncertainty of the travel planning process.

Figure 1
Multidimensional Scaling Map of Travel Websites Visitation



airline- Airlines; accom – Accommodations; cvb – Convention & Visitor Bureaus; destin – Destinations; onagency - Online Agencies; map – Maps; portal – Portals; searche - Search Engines; travco – Local Travel Companies; travmag - Travel Magazines; travguid - Travel Guides; news - News; weather – Weather.

On the vertical axis in P1, there is again a distinct difference in the groupings of information sources. At the bottom end of the map are information sources that are perceptively closer to the destination(s). Websites of CVBs, destinations, maps, accommodations, and travel companies are all information sources more affiliated with the destination as opposed to the grouping at the top end of the map that include portals, online agencies, news, travel guides and travel magazines etc. These are information sources that relatively more objective as sources of travel information compared with the bottom end like websites of destinations, CVBs and those of accommodation companies. These information are subjective sources of information, where information is relatively more destination-centric and biased. Given this divergence, it was decided to name Dimension 2 as the “*type of information sought*” with “objective” and “subjective” serving as the two types.

Plots P2, P3 and P4 illustrate similarities/dissimilarities based on conditions set a priori. When respondents had one destination in mind (P2), travelers clearly approach airline sites first so as to ensure availability and purchase tickets. However, in P4 (no destination mind) where travelers clearly start with search engines followed by online agencies and portals, and then access airline websites. This can be explained by the exploratory nature of search here wherein travelers

want to close in on a consideration set of destinations to make the choice eventually. When it comes to the later phase of the planning horizon, there isn't visually demonstrable variability between the three scenarios.

While the study explains for two dimensions (level of uncertainty and the type of information sought), past research would indicate the presence of the nature of search that may be utilitarian or hedonic (Hoffman and Novak 1996; Vogt and Fesenmaier 1998). However, the limitations of the data based on the broad survey setting rendered it impossible to extract this dimension. Importantly, there is a significant overlap in the nature of services and products offered between travel websites. Since the data does not provide insights on the actual purpose of visitation to websites, it was not possible to derive this additional dimension. Future research should investigate the viability of this proposed dimension in a more controlled setting. Participants should be given controlled choices of websites for specific purposes, which can then help identify utilitarian and hedonic search behaviors as a separate dimension. Unlike in the traditional context, where information sources were categorized as contributory and decisive (Fodness and Murray, 1998), this study categorized the "type of information sought" as objective and subjective information sources. This interpretation is in line with the dynamic nature of search in a computer mediated environment (CME). Arguably, contributory and decisive sources can prevail in the online environment too. However, the wide range of choices on the Internet (available within a few clicks of the mouse) makes it difficult to capture this phenomenon in a descriptive research setting. In fact, the contributory vs. decisive dichotomy can be a sub-context within this broader umbrella of objectivity/subjectivity, and can be investigated further.

IMPLICATION AND CONCLUSION

Theoretically, the study provides an underlying framework of constructs in online pleasure travel planning. It empirically validates two of the three dimensions, while providing conceptual and methodological inputs towards deriving the third. While uncertainty in travel planning guides the sequence of activities in online pleasure travel planning, travelers also distinguish between objective and subjective sources, and apply them accordingly in the travel decision making process. Subjective sources are more destination-centric and serve to provide information/services aimed at planning the destination specific aspects of travel. Objective sources provide gateways for travelers to determine the value of deals as well as provide relatively objective opinions on travel experiences. Future research should empirically determine the third proposed dimension of online pleasure travel planning in the nature of search behaviors (utilitarian and hedonic). Additionally, studies can explore the impact of contingencies such as the mode of travel, purpose of trip and prior knowledge of the destination.

For travel marketers, findings of this study can help in more effective design of online travel planning systems. Additionally, the study provides the first known context of where travel websites are positioned specific to their value propositions in the travel planning process. Using this, marketers can also tailor messages for pleasure travel planners that match their proposed mindsets. Destination managers can develop re-positioning strategies using the findings of the study. Again, if destination websites want to become intermediaries, they have to move up the hierarchy to effectively meet the functional needs of consumers.

One of the limitations of the study has to do with measurement accuracy pertaining to when travelers visited the websites actually. The gaps between when travelers said that they actually visited websites and the time of recall during the survey could have marginally impacted measurement accuracy. Another limitation of the study was the absence of the impact of offline travel information search on online pleasure travel planning. Future research can develop a comprehensive framework of travel planning that encompasses offline and online media.

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THE ROLE OF SPECIAL EVENT PLANNERS AND SPECIAL EVENTS IN FUNDRAISING FOR NONPROFIT ORGANISATIONS

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ABSTRACT

While there is substantial evidence that nonprofit organizations rely on special events to generate revenue, there is a paucity of literature regarding who is responsible for the production of these events and the percentage of nonprofit revenue they raise. A descriptive research design was used for this study. A mail-administered survey questionnaire was completed by 70 American members of the International Special Events Society who identified themselves as nonprofit organization event planners (NOEP). The study, which yielded a 42.7% response rate, was used to profile NOEP, determine the percentage of total revenue generated through events, and to identify the type(s) of fundraising events held.

Key Words: Special Events, Nonprofit Organizations, Fundraising, Event Planners

INTRODUCTION AND LITERATURE REVIEW

A nonprofit organization is “an organization which exists for educational or charitable reasons, and from which its shareholders or trustees do not benefit financially” (WebFinance, Inc., 2002). The nonprofit sector in America is substantial. According to the most recent National Center for Charitable Statistics’ Report, (NCCS, 2001) there are over 246,000 nonprofit organizations in the United States whose combined revenue is nearly \$824 billion. This revenue includes over \$168 billion in support through gifts, grants and government and private sector contributions (NCCS, 2001). The methods used by nonprofits to raise this kind of monetary support include telephone appeals and face-to-face requests (Schaff & Schaff, 1999), and one of the most popular methods, special events (Seltzer, 1987).

Special events represent a vast and growing segment of the economy. The event planner coordinates any or all aspects of an event, whether a small gathering or a large festival. The International Special Events Society’s 2001-2002 Membership Directory lists over 1,200 American special event planners, nearly 200 of which are self-identified as nonprofit organization event planners (NOEPs). While there is substantial evidence that nonprofit organizations rely heavily on special events to generate revenue, as well as accomplish other organizational objectives, a review of the literature reveals a paucity of information about the role of event planners and the significance of fundraising events to nonprofit organizations.

Fundraising Events

The existing literature makes clear that special events have become a popular means of fundraising for nonprofit organizations. However, it also suggests that an organization must carefully weigh the pros and cons of producing a fundraising event before deciding to use that event to support its traditional fundraisers. A fundraising event is not only time and energy consuming (Kaitcer, 1996), requiring “hundreds, sometimes thousands, of hours of preparation” (Catherwood & Van Kirk, 1992, p. vii), but can also be expensive (Kaitcer, 1996), requiring an initial investment and an outlay of funds before any income is generated (Seltzer, 1987). Lastly, a fundraising event can “provide so much fun for volunteers that their efforts may be diverted from... other types of fundraising which are less immediately gratifying and rewarding” (Seltzer, 1987, p. 149).

In spite of potential time and financial constraints, nonprofit organizations in the United States use special fundraising events more than any other form of fundraising (Seltzer, 1987). They are “important to... nonprofit organizations throughout the United States that serve... metropolitan cities to small towns” (Leibert & Sheldon, 1974, p. 15) and have “proven themselves to be reliable and steady sources of income” (Seltzer, 1987, p. 148). Seltzer (1987) notes that there can be numerous advantages to raising money through fundraising events. A “well-planned [fundraising event] can assuredly generate revenue” (p. 148) and repeating a past successful event can help an organization reduce its costs and predict its income. Seltzer (1987) also notes that a fundraising event can provide the opportunity to broaden its constituency by inviting new people and that no other form of fundraising can “bring so much pleasure to both the organizers and the participants” (p. 148). Successful fundraising events can even become “traditions in their own right,

drawing old and new participants each year” (Seltzer, 1987, P. 148). Fundraising events also provide the unique opportunity to “signal to the public at large the numerical strength of your constituency and the resulting leverage that you can bring to bear on any issue [the organization] might decide to tackle” (p. 148).

The Event Planner

The role of the event planner has also been addressed in the literature. Catherwood and Van Kirk (1992) observe that special events “do not just happen; they are well planned and coordinated” (p. vii). The person who plans and coordinates a special event, whether for profit or fundraising, is an event planner. An event planner can be a nonprofit organization’s board member, staff member, volunteer or an outside consultant hired by a nonprofit organization (Freedman, 1998; Geier, 1986; Seltzer, 1987). Regardless of their origin, the event planner is a “person of vision, energy, and commitment” (Devney, 1990, p. 3) who oversees a special event from start to finish (Freedman, 1998). Internal event planners (IEPs) within nonprofit organizations run the gamut from the organization’s executive director to a fundraising director to a competent volunteer (Freedman, 1998).

Geier (1986) points out that there is a decided advantage to involving the staff of an organization in planning fundraising events as “they usually have a sense of accountability to and an understanding of the organization” (p. 110). Another advantage of utilizing an IEP is that they have an established volunteer base on which to draw for delegation of duties. Goldblatt (1997) states that volunteers are the “life blood” of many special events. In addition to being free or low-cost help, volunteers can offer valuable skills, contacts, enthusiasm, commitment to the organization and outreach into the community (Geier, 1986; Kaitcer, 1996). In turn, volunteers get a great deal out of working on a fundraising event (Kaitcer, 1996), such as self-respect, admiration, self-fulfillment and recognition as an active community leader (Harris, 1991; Kaitcer, 1996).

When hired by a nonprofit organization, external event planners (EEP) are able to “give the [fundraising] event their full attention instead of trying to squeeze event planning into many other job responsibilities as [IEPs] must often do” (Harris, 1991, p. 37). They are particularly useful to organizations that have “a small staff, a weak volunteer structure, or an inadequate prospect mailing list” (p. 37), as they are often people who have been successful event planners for other nonprofits and have subsequently become professional event planners (Harris, 1991). Many nonprofit organizations think that hiring an EEP to coordinate their fundraising events is an added expense or a luxury, when in fact they can save the organization money in the end (Allen, 2000). EEPs know by experience which events work and which events do not (Harris, 1991). They may have expertise and experience in the areas in which an organization needs help, and may have contacts that they can use to an organization’s advantage (Geier, 1986). EEPs have established relationships with providers and are expert at negotiating the best prices for services (Harris, 1991). Finally, an EEP will do more than simply tell an organization’s staff and volunteers what to do, they will “get their hands dirty” working with and for the organization to get the job done (Geier, 1986).

Once a nonprofit organization has hired an EEP, the event planner will present the organization with a “thorough, objective evaluation of the options” then implement the organization’s choice as effectively and efficiently as possible (Geier, 1986, p. 113). The EEP may also be expected to train any staff and/or board member of the organization as part of their contract (Geier, 1986). Other responsibilities the EEP may have to an organization is to be “a neutral voice of authority in smoothing [internal] bickering” and to “[quash] over-ambitious or unrealistic ideas” of the organization (Harris, 1991, p. 37). When an event is decided upon, the EEP must provide the organization with a strategic conceptual overview of the event design “including planning, organizational, logistical, and negotiating elements and the tiny details” that make the event magical (Allen, 2000, p. 8-9). The EEP ensures that fire and safety regulations are met, that all appropriate permits are obtained and that the proper insurance is in place (Allen, 2000). Most importantly, the EEP ensures that the fundraising event initially visualized by the organization becomes a reality (Allen, 2000).

On occasion a nonprofit organization may choose to hire an EEP to support or supplement the work of the IEP. In this case, the responsibility of the IEP is to divide the work of planning the fundraising event between the board members, staff, volunteers and the EEP (Geier, 1986). In turn, the responsibilities of the EEP become “anticipating what must be done in the areas they’ve been retained to handle,” becoming familiar with the organization for whom they work, serving as “advocates for the organization” and “using whatever influence and connections they have on behalf of the organization” (Geier, 1986, p. 113-114).

While it is clear that nonprofit organizations routinely use special events as a means of fundraising, and that there is some general information available about using events as fundraisers and the role of the event planner in the process, no formal research has previously been conducted which examines the role of special event planners and special event fundraising for nonprofit organizations.

Research Objectives & Procedures

This study was designed to address the following objectives: 1) profile NOEPs, 2) describe the responsibilities of internal and external event planners (EEP) in planning fundraising events, 3) determine the reason(s) nonprofit organizations choose IEPs and/or EEPs to plan fundraising events, 4) determine the percentage of nonprofit revenue generated through fundraising events, 5) identify the type(s) of fundraising events used to generate revenue for nonprofit organizations, and 6) identify the type(s) of fundraising events that generate the most revenue for nonprofit organizations.

Subject Selection

The population of this study was American nonprofit organization event planners (NOEP) that are members of International Special Events Society. The subjects were identified through ISES' 2003-2004 *Membership Directory*. Included in ISES' 2003-2004 *Membership Directory* were members' names, job title, chapter affiliation and mailing address. These one hundred and eighty-two subjects were dues-paying members of ISES and self-selected their job title as NOEP.

Instrument

The survey was developed after an extensive review of the literature. The first section of the survey included an open-ended question regarding the percentage of nonprofit revenue generated through fundraising events, and the average number of fundraising events that are planned by the subject per year. Close-ended, unordered questions were used to identify the type(s) of fundraising events used to generate revenue for nonprofit organizations, and the fundraising events that generated the most revenue for the organization.

The second section of the questionnaire included questions used to describe the role and responsibilities of internal event planners, and when used, EEPs in planning fundraising events. The question presented a list of potential event planner responsibilities taken from the literature and two "other" options to be filled in by the subject. The subject was asked to mark all responsibilities that apply to him/herself in one column and to mark all responsibilities that apply to any EEP with whom they have worked.

In the next section, questions were used to determine the reason(s) nonprofit organizations choose internal event planners (IEPs) and/or EEPs to plan their fundraising events. The first question presented the subject with a list of potential reasons taken from the literature as to why an IEP is used by their organization and two "other" options to be filled in by the subject. The subject was asked to mark all reason(s) that apply. The second question presented the subject with a list of potential reasons taken from the literature as to why an EEP is used by their organization and two "other" options to be filled in by subject. The subject was asked to mark all reason(s) that apply.

The last portion of the questionnaire contained questions to gather demographics about the population being studied. These demographic questions were closed-ended and asked the subject to choose the most appropriate answer from mutually exclusive categories.

Validity and Reliability

The survey questionnaire was assessed for both content and face validity. A panel of experts from the fields of research, tourism, hospitality and special events evaluated the questionnaire to establish its inclusiveness of all the variables it proposed to study. The same panel also evaluated the questionnaire for any problems with question clarity, wording, complexity, reading level, format, length and overall appearance. Additionally, the survey questionnaire was reviewed by the New Mexico State University College of Agriculture and Home Economics' College Survey Review Committee and New Mexico State University's Institutional Review Board.

A test-retest design was used to determine reliability of the survey questionnaire. The survey questionnaire was administered to a population similar to ISES NOEPs. Ten non-ISES NOEPs were given the survey questionnaire to complete and return. Two weeks after completing the initial questionnaire, the same survey questionnaire was administered to the respondents. The results of the preliminary test were compared with the results of the retest to determine reliability. The coefficient of stability was calculated for all items on the survey questionnaire. Virtually all items met or exceeded the pre-established .75 coefficient of stability. Upon review of the three items that did not meet the standard, it was determined that the questions were straight-forward and in one instance the wording came directly from the literature.

Data Collection and Analysis

A modified Dillman procedure was used to collect data. All data was compiled and analyzed. Responses were reported with frequency and percentage, and with median and mean where appropriate. Nonresponse bias was controlled for through a comparison of early, first mailing (n = 40), to late, third mailing (n = 12), respondents. Early to late responses

to the survey questions concerning the percentage of nonprofit revenue generated through fundraising events and the number of fundraising events used to generate revenue for nonprofit organizations were compared. Using t-test and chi squared tests of significance, no significant differences between early and late were found, therefore the data is considered generalizable to the population.

RESULTS AND FINDINGS

One hundred eighty-two International Special Events Society (ISES) nonprofit organization event planners (NOEP) were identified as the population for this study. Seven surveys were returned due to inaccurate or incorrect mailing information. Two subjects responded that they don't do any fundraising and would not be completing the survey questionnaire. Two subjects responded that they were not in the appropriate position in their organization to complete the survey questionnaire. Seven subjects responded that they were not NOEPs. Of the remaining 164 subjects in the accessible population, 70 ISES NOEPs completed and returned the survey; yielding a 42.7% response rate.

Profile of Nonprofit Organization Event Planners

Given that no demographic profiles of NOEPs exist in the literature, this study sought to create one. The "average" NOEP is a woman (88%) between the ages of 26-45 years old (71.5%) with a bachelors degree (69.6%), earning a salary over \$41,000 (68.6%). No evidence currently exists to explain why there is such a large percentage of female NOEPs. Nearly 82.6% of respondents hold at least a bachelor's degree. The average NOEP's education far exceeds that of the national average for holding a bachelors degree; 17.4% of individuals 25 and over in 2001 (NCES). The gender and salary of responding NOEPs is similar to those of other professionals in the meeting and events industry. According to *Convene's* Annual Compensation Survey of members of the Professional Convention Management Association meeting managers are primarily female (78%) and have a mean salary of \$54,677 (Professional Convention Management Association, 2004).

Respondents have worked as non-profit event planners, on average, 8.4 years, with an average of 7.5 years working for their current organization. Approximately fifty-six percent of respondents indicated that they plan an average of 1-5 events per year. While a mean of 67.1% of their work day is spent planning events, nearly 30% of respondents indicated they spend 100% of their work day planning events. When looking at the professional background of NOEPs, a sizeable 61% have never worked as for-profit event planners. While nearly 46% of NOEPs have worked for 6-10 years as event planners in the nonprofit sector, averaging 8.4 years. These two figures together suggest that NOEPs do not work in the nonprofit sector by accident. It might be assumed that NOEPs seek professions in the nonprofit sector because of the sense that nonprofit organizations positively contribute to society either financially or educationally, or both.

While 55.7% of NOEPs plan 1-5 fundraising events a year, just over 21% don't plan any fundraising events. Raising money may not be the purpose of the events planned by this 21%. Other purposes of special events include: education, conveying a message about the organization, offering something for the spirit and saying "thank you" for specific support (Flanagan, 1982; Geier, 1986; Harris, 1991; Leibert & Sheldon, 1974; Wendroff, 1999). This conclusion suggests the need for future clarification of the purpose of the events planned by NOEPs.

Only 30% of NOEPs spend 91-100% of their day in the various activities that constitute planning the organization's events. Since NOEPs are internal to their organizations it is reasonable to suggest that they undertake other organizational responsibilities. However, it is uncertain what these responsibilities are and if they are similar from organization to organization.

Percentage of Revenue Generated Through Fundraising Events

The results of this study support the observation in *The Grassroots Fundraising Book* that fundraising events only account for a minority of a typical nonprofit organization's income (Flanagan, 1982). On average, responding organizations generate significantly more revenue through traditional fundraising efforts (41%), such as telephone appeals and scheduled mailings, than they do through special fundraising events (21%), such as charity balls and festivals. However, nearly 20% of respondents indicate that over half of all of their organization's total revenue is generated through the use of fundraising events. It is clear that fundraising events can play anywhere from no role at all to a major role as revenue generators for nonprofit organizations (see Table 1).

It should be noted that 12.9% of respondents did not answer the questions regarding the origin of their organization's revenue. It might be assumed that these nine respondents did not know what percentage of their organization's revenue was generated through either traditional fundraising efforts and fundraising events. This lack of

knowledge suggests that either these NOEPs are not privy to this information or that fundraising is not the primary purpose of these organization's special events

Table 1
Percentage of Revenue Generated Through Fundraising Events (N = 61)

Response	Frequency	%
Zero	19	31.1
.05-10%	18	29.5
11-20%	6	9.8
21-30%	4	6.6
31-40%	1	1.6
41-50%	1	1.6
51-60%	4	6.6
61-70%	1	1.6
71-80%	4	6.6
81-90%	2	3.3
91-100%	1	1.6
Mean = 21.0% and Median = 5.0%		

Types of Fundraising Events Used

A review of the literature resulted in a list of 65 types of fundraising events. For this study, these 65 types were narrowed down to the twelve most frequently mentioned in the literature, and those 12 were listed on the survey questionnaire. To supplement these 12 types of fundraising events, most respondents wrote in at least one "other" type of fundraising event, and many wrote in more than two. The result is a list of 69 individual types of events planned by NOEPs. With the exception of a few organization specific fundraising events, such as Black History Month Gala, the literature list, dating from as far back as 1974, and the survey list are very similar. This similarity suggests that organizations have perpetuated particular fundraising events for nearly 30 years. As Seltzer (1987) notes, repeating a past successful event can help an organization reduce its costs and predict its outcome. However, this recycling of events could be due to a lack of imagination or the lack of time to pursue new ideas.

Twenty-percent or more respondents identified the most frequently planned types of fundraising events in order as charity balls, auctions, golf tournaments, festivals, and wine-tastings. However, the range of events planned by subjects is diverse, as evidenced by the 57 "other" types of events that were written in by respondents. After the top five planned fundraising events there was a marked fall-off in frequency. Twenty-five percent or more of respondents identified charity balls, auctions and golf tournaments as generating the most revenue for their organizations; the same three that are most frequently planned by respondents. All other events were identified by 13% or fewer respondents as "most revenue generating."

Responsibilities of Internal and External Event Planners

The literature presented 12 major responsibilities of an event planner, regardless of whether they work for nonprofit or for-profit organizations (see Table 2). Of these 12, this study found that the three major responsibilities of the NOEP require the expertise that can only come from someone within the organization. An NOEP is familiar with the goals, staff, budget and books of an organization. This makes NOEPs the most advantageous event planners to set and define the goals of the event (95.7%), choose, motivate and evaluate staff (95.7%) and plan the budget and balance the books (92.9%).

Thirty percent of respondents' organizations employ EEPs to undertake some of the major event planning responsibilities, either on their own, or with the cooperation of the NOEP. Nearly 29% of the NOEPs who have utilized EEPs have had them target the audience and develop the publicity campaign and 23.8% have had them sell the special event to the organization, sponsors and the public. None of the major responsibilities of the EEP require a unique knowledge of the organization. Regardless of whether they are working alone or with the NOEP, there is a single responsibility for which an EEP seems invaluable: designing the event's theme, decorations and printed materials. About 52% of NOEPs employ EEPs to attend to this responsibility on their own, while nearly 62% of NOEPs undertake this responsibility alongside the EEP.

The responsibilities that nonprofit organization event planners share most often with EEPs are finding and using a site to its fullest potential (38.1%) and choosing and implementing the food service system (33.3%). Apparently, these responsibilities benefit from the knowledge and expertise shared by internal and external planners.

Table 2
The Major Responsibilities of Internal and External Event Planners

	Internal (N = 70)		External (N =23)		Both (N = 23)	
	%	n	%	n	%	n
Set and define goals of an event	67	95.7	1	4.4	1	4.4
Choose, motivate and evaluate staff	67	95.7	0	0.0	1	4.4
Plan the budget and balance the books	65	92.9	0	0.0	1	4.4
Schedule/assign tasks for staff/volunteers	64	91.4	0	0.0	4	17.4
Monitor ticket sales/registration process	61	87.1	2	8.7	4	17.4
Recruit volunteers	61	87.1	0	0.0	2	8.7
Find and use a site to its fullest potential	60	85.7	1	4.4	8	34.8
Develop and schedule programming	59	84.3	3	13.0	3	13.0
Choose and implement food service system	57	81.4	3	13.0	7	30.4
Target audience/develop publicity campaign	53	75.7	6	26.1	4	17.4
Sell the special event to various publics	51	72.9	5	21.7	2	8.7
Design theme, decorations/printed materials	42	60.0	11	47.8	13	36.0
Other	7	10.0	5	21.7	1	4.4

The primary reason nonprofit organizations hire an event planner to work internally to the organization is that they have an accountability to and an understanding of their organization (80%). The secondary reason is one of convenience: the convenience of having an event planner on staff and on the premises (70%). Among the reasons overlooked in the literature, and therefore not included as a category on the survey questionnaire, was the “other” reason of the cost effectiveness of having an IEP. If 63% of NOEPs spent up to 80% of their workday planning events, it is reasonable to expect that the rest of their workday can be spent in other organizational activities.

Geier (1986) notes that EEPs may have expertise and experience in the areas in which an organization needs help and may have contacts that they can use to an organization’s advantage. This study supports that assertion as EEPs are hired by responding nonprofit organizations most often for their event planning expertise (47.6%) and for their established relationship with providers (42.9%). The nearly 48% of respondents who have employed an EEP responded that the major reason they employed the EEP was due to their event planning expertise. The other major reason for employing an EEP given by these respondents was EEPs’ established relationships with providers (42.9%).

Conclusions and Recommendations

This was the first study of its kind to look at the role of special event planners and special events in fundraising for nonprofit organizations. The results of this study are preliminary and descriptive and should lead to further exploration of the relationship between the special events industry and the nonprofit sector.

The results of this study can be utilized by nonprofit organizations, NOEPs and EEPs to better understand the role and significance of fundraising events to nonprofit organizations. Nonprofit organizations that are not currently employing fundraising events, but would like to begin to do so, should consider auctions, charity balls, festivals, golf tournaments, wine-tastings and run/walks. These are the most popular and the most financially successful fundraising events for responding nonprofit organizations.

Nonprofit organizations that employ NOEPs and/or EEPs should also use the results of this study for human resources purposes. Job descriptions should be created for hiring NOEPs using the information in this study. EEP contracts should be written with the results of this study in mind.

Nonprofit organizations that currently plan fundraising events should compare the type(s) of events they use to those that are planned and are financially successful for other nonprofit organizations. NOEPs should use the results of this study to come to a better understanding of their important role in their nonprofit organization. In addition, the results of this study can help NOEPs identify the responsibilities that are best undertaken by EEPs, such as designing the special event’s theme, decorations and printed materials.

EEPs should use the results of this study to understand the role and significance of fundraising events to nonprofit organizations. Additionally, the results of this study can enable EEPs to understand the reasons nonprofit organizations are hiring them and the responsibilities they are most often hiring EEPs to undertake. Understanding these reasons and responsibilities will aid EEPs in marketing to the nonprofit sector.

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HOTEL-RESTAURANT BRAND ALLIANCE: THE ROLE OF CONCEPT CONSISTENCY AND GOAL SALIENCE
IN CONSUMERS' FIT JUDGMENTS

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ABSTRACT

Partnering with well-known restaurant chains is becoming increasingly common, particularly for mid-priced hotels. The perception of fit between two entities in an alliance is an important factor influencing consumers' evaluations of the partnership. In this study, the authors examine the role of two competing theories, concept consistency and goal salience, in driving consumers' fit judgments of hotel-restaurant brand alliances. The results of this study reveal that both stimulus-driven (concept consistency) and goal-derived inputs substantially affect consumers' perceptions of fit. This research has several important implications to the hospitality industry in search for "ideal" alliance partners.

Key Words: brand alliance, goal salience, brand concept, perceived fit, hedonic goal, utilitarian goal.

INTRODUCTION

Brand alliances are becoming increasingly popular in today's brand-conscious environment. Research in this topic, however, is scant. In the context of the hospitality industry, hotel-restaurant brand alliance refers to the conjunction of two brands within one space (e.g., California Pizza Kitchen at Westin Hotels). A key construct in brand alliances is the perception of fit between the two entities (Park, Jun, & Shocker, 1996; Simonin & Ruth, 1998). In fact, literature is depleted with frameworks relying on perceived fit to explain affect and behavioral transfer (Bhat & Reddy, 2001; Kamins, 1990; Lord, 1982; Swaminathan, Fox, & Reddy, 2001; Till & Busler, 2000).

The marketing literature offers several competing definitions of fit—feature-based, usage-based, and schema- or concept-based (Aaker & Keller, 1990; Broniarczyk & Alba, 1994; Park, Milberg, & Lawson, 1991; Ratneshwar & Shocker, 1991). Yet, prior research in categorization shows that goals can alter category representations (Barsalou, 1982, 1985, 1991). Moreover, goals provide the context in which a consumer organizes information processing, makes categorizations, and reaches similarity judgments (Huffman & Houston, 1993; Shocker, Stewart, & Zahorik, 1990). The purpose of this study is to further our understanding of the role of goal salience in consumer perceptions of hotel-restaurant brand alliances. More specifically, we examine the effect of two types of goals (hedonic and utilitarian). A hedonic goal reflects motivation for symbolism, value-expression, affective consideration, and the satisfaction of sensory or emotional wants (Puto & Wells, 1984; Rossiter, Percy, & Donovan, 1991). In contrast, a utilitarian goal refers to functional and cognitive purchase motivations. In this study, we seek to answer the following questions. Is brand concept/image or goal salience the predominant factor influencing consumers' fit judgment? Can goals alter the mental representations of objects that are highly similar on the surface or at the concept level? For instance, do hedonic goals diminish the perceived similarity between a hotel and a restaurant that share the same concept (e.g., relaxing environment)? Or, are these similarity representations so rigid as to preclude any goal intervention?

Conceptual Background

Previous research suggests that the extent to which two products resemble each other at a surface level significantly influences consumers' similarity representations (Lefkoff-Hagius & Mason, 1993; Rosch, 1978). The traditional feature-based explanations of similarity focus on common and distinctive product features as bases for similarity judgments (Broniarczyk & Alba, 1994; Ratneshwar, Barsalou, Pechmann, & Moore, 2001; Ratneshwar, Warlop, Mick, & Seger, 1997). However, work on concept consistency indicates that any product characteristic may serve as the organizing basis for symbolic or functional similarity (Martin & Stewart, 2001; Park et al., 1991). In the hospitality industry, these concepts or image are formed through various surface-level features. For instance, to portray an exciting concept, restaurant operators might use bright colors, funky artifacts, unusual table settings and loud music. Likewise, a restaurant reflecting a convenience image is likely to be conveniently located and offering quick service.

Although brand concept may be an important dimension in making similarity judgment, research on goal-driven categorization offers a more flexible and pragmatic view of similarity representations. For instance, Barsalou (1985) showed that participants judged a raccoon and a snake to be more similar when they were provided with an appropriate context. Moreover, Ratneshwar et al. (2001) found that an apple and a doughnut were rated as more similar than apple and orange when the context of “things people might carry along to eat in their cars” was made salient. In other words, the contextual information framed consumers’ perceptions by focusing their attention selectively on goal-relevant aspects of products.

The preceding discussion suggests that consumers’ goals in different consumption situations (are called consumption goals hereafter) are likely to influence their fit perceptions. Consider, for example, an individual who is patronizing a hotel restaurant due to its convenience. The convenience-oriented goal will “pull” the hotel and the restaurant together regardless of the potential concept inconsistency. Or, the goal to have an exciting dining experience while staying in a hotel will “pull” together the seemingly distinct concept between a hotel (i.e., relaxing) and a restaurant (i.e., lively).

Despite robust support for goal-driven categorization (Barsalou, 1982, 1985, 1991; Ratneshwar et al., 1997; Ratneshwar, Pechmann, & Shocker, 1996), there is some evidence that product categorizations might be resistance to goal effects. For instance, Ratneshwar et al. (2001) showed that a plain granola bar was rated as more similar to a candy bar than to a fruit yogurt, and a broiled chicken sandwich was judged as more similar to a sliced turkey sandwich than to a cheese pizza. Translating these results to our context, if concept consistency is the driving force of consumers’ fit judgments regardless of the consumption goals, the perceived fit between a hotel and a restaurant will be higher when the two entities share a similar concept (e.g., relaxing atmosphere) than when the concepts are a mismatch (e.g., a relaxing hotel and an exciting restaurant).

The inconclusive findings between concept-based and goal-driven similarity judgments lead us to propose that the two factors might jointly influence consumer fit perceptions. Park and Hastie (1987) demonstrated that subjects employ a combination of category-level and instance information in making judgments of other individuals. Ratneshwar et al. (2001) also suggest that fit judgment may be a result of joint influence between feature similarity and goal salience. Moreover, Martin and Stewart (2001) revealed that the number and structure of the bases or dimensions of similarity is affected by consumption goal. Hence, we hypothesize that:

H1a: There is a significant interaction effect between brand concept and consumption goal in consumers’ fit judgments.

In addition to the interactive effects of brand concept and goal salience, we propose that hedonic and utilitarian goals will have a differential impact on consumers’ fit perceptions. Previous work shows that contextual information influences consumer perceptions by focusing their attention selectively on goal-relevant aspects of products (Huffman & Houston, 1993; Ratneshwar et al., 1996, 2001). Consequently, hedonic (utilitarian) goals should prompt attention to information carrying symbolic (functional) meaning. Consider an example where a customer is patronizing a hotel restaurant in order to have an exciting dining experience (hedonic goal) versus a case where the customer is seeking convenience in his dining experience (utilitarian goal). A hedonic goal is likely to prompt attention to atmospheric cues such as the décor, layout, and music. Because a product concept is formed from various product attributes (Martin & Stewart, 2001; Park et al., 1991), processing these environmental cues is likely to activate the restaurant concept which will then be checked for consistency with the hotel concept. In other words, restaurant ambience may be evaluated against the consumption goal, as well as concept consistency between the hotel and the restaurant.

On the other hand, although utilitarian goals are not likely to activate the processing of restaurant attributes (e.g., décor, style, music, layout, and clientele), brand concept is expected to play a role in the fit judgment of a hotel-restaurant brand alliance. Past research shows that a symbolic brand concept is important in consumers’ brand evaluations (Bhat & Reddy, 2001; Gwinner & Eaton, 1999), particularly in the context of services (Padgett & Allen, 1997). Following the joint effects argument, we propose that both goal salience and concept consistency will influence consumers’ fit perceptions when the consumption motivation is utilitarian. In other words, simply satisfying the utilitarian goal (e.g. convenience) is not sufficient if the image of the restaurant fails to match that of the hotel. Hence, we hypothesize that

H1b: When the restaurant concept is distinctive from the hotel but consistent with the consumer’s hedonic goal, then the perception of fit is at least equally high, if not higher, compared to when the restaurant concept is consistent with the hotel but incongruent with the hedonic goal.

H1c: Under utilitarian goals, perceived fit will be higher in conditions of concept match rather than mismatch.

METHOD

Development and Pretesting of Stimulus Materials

Two pretests were conducted to fine-tune the stimuli and to ensure the realism of the selected consumption goals or situations. Subjects in both pretests were graduate students and faculty and staff members in a large northeastern university, respectively. The objective of the first pretest was to develop appropriate stimuli. To that end, video clips portraying two hotels (X1 and X2) and three restaurants (Y1, Y2, Y3), were tested. Twenty-nine graduate student subjects were asked to evaluate the five properties based on the overall concept (a) relaxing/calm, and (b) exciting/fun on seven-point scale (1 = not at all, 7 = very much so). A repeated measures analysis revealed that X1 ($M = 2.91$) and X2 ($M = 3.10$) were not significantly different in their concept ratings ($p = .330$). However, both hotels were significantly less exciting than any of the three restaurants (all $ps < .05$). Furthermore, the concept was significantly different among the three restaurants (all $ps < .05$). Specifically, Y3 ($M = 5.83$) was perceived as more exciting than Y1 ($M = 4.48$), which in turn was more exciting than Y2 ($M = 3.59$). In short, both hotels were rated as equally relaxing. Restaurant Y2, Y1, and Y3 were rated more exciting than the hotels in an ascending order. As a result, Y2 and Y3 were selected to represent the two different brand concepts that would partner with X1.

The purpose of the second pretest was to determine the realism of the selected consumption situations. Responses from 115 (71.87%) faculty and staff members indicated a need for two changes. First, the types of restaurants were not appropriate when traveling with family. Rather, they are suitable for individuals traveling with friends. Second, X1 was evaluated as too elegant for neither the restaurants to match-up with. Following this feedback, the consumption situations were tailored toward traveling with friends for leisure purpose. X1 was also replaced with X2 in the main study.

Research Design and Subjects

The main study employed a 3 (consumption goal) x 2 (brand concept) between subjects factorial design. The first factor involved a manipulation of three different consumption goals: (1) a relaxing goal, in which consumers were looking for a relaxing dining experience; (2) an excitement goal, in which consumers were seeking to dine in an exciting environment; and (3) a convenience goal, in which consumers were mainly concerned about the proximity of the restaurant. The first two goals represent hedonic goals that induce symbolic or concept-based information processing while the third goal manipulation involved a utilitarian goal in which functional performance (i.e. proximity) is the key concern.

The second factor manipulated brand concept between the hotel and the restaurant. The hotel concept (i.e., relaxing) was kept constant while the restaurant concept was manipulated to be either consistent (i.e., calm and relaxing) or inconsistent (i.e., lively and exciting) with the hotel.

Subjects were 176 travelers waiting for their planes at a major airport in the United States. This subject pool was deemed appropriate because they are actual or potential hotel guests. Because the video clips were shot in a northeastern university town, the subject pool is unlikely to be familiar with the actual hotel and restaurant portrayed in the video clips. Consequently, potential confounding variables, such as familiarity and prior attitude, were minimized (Simonin & Ruth, 1998).

Experimental Procedure and Instrument

Subjects were randomly assigned to one of the six experimental conditions. The questionnaire contained two parts. The first part focused on pre-alliance perceptions of the stimuli. Subjects first viewed a video clip of a mid-priced hotel before answering a series of questions regarding the hotel concept and their attitudes toward the hotel. Next, they viewed another video clip, one of the mid-priced restaurants. Neither the hotel nor the restaurant brand was disclosed to respondents. Each subject watched a clip of one of the two types of restaurant (i.e., relaxing or exciting). A series of questions pertaining to the restaurant concept, subjects' attitudes toward the restaurant, and concept consistency ratings between the hotel and the restaurant followed the video clip.

In the second part of the questionnaire, subjects read a cover story explaining the alliance situation. Subsequently, subjects were asked to imagine themselves in one of the three consumption situations described in a scenario. They were told that the hotel they viewed in the video clip shown earlier was the one they stayed in, and that it had partnered with a national restaurant chain, which corresponded with the restaurant video they had been shown. Then, subjects were asked to indicate their perceptions of fit between the hotel and the restaurant. Socio-demographics variables were placed at the end of the survey. Upon completion, respondents were thanked and paid for their participation.

Measures

Three, seven-point, semantic differential scales developed from literature in event sponsorship, celebrity endorsement, and brand extension (Bhat & Reddy, 2001; Speed & Thompson, 2000; Till & Busler, 2000) were used to assess the dependent variable—perceived fit or compatibility in the alliance. The question was: “In reference to your dining

needs, what do you think about Hotel X and Restaurant Y?” The three semantic differential scales included: do not belong together/belong together, are not compatible/are compatible, and do not fit well/fit well (Cronbach’s alpha = .973).

To ensure that our independent variables (i.e., experimental factors) were perceived as intended, the following items were measured (1) hotel concept, (2) restaurant concept, (3) concept consistency, and (4) consumption needs. The first three were directed toward the hotel and the restaurant concept while the last tapped into the scenario manipulation. Subjects were asked to rate the hotel and restaurant in terms of their general atmosphere (1 = calm and 7 = lively). To measure the consistency between the two concepts, we adapted items from Martin and Stewart’s (2001) study (e.g., highly dissimilar/highly similar and not at all alike/very much alike ($r = .951$). Finally, to verify that subjects prioritized their consumption needs according to the scenario descriptions, three questions on the goal manipulations were included (i.e., “to what extent did you want to dine in a relaxing environment”, “to what extent did you want to dine in an exciting environment”, and “to what extent was the proximity of the restaurant critical to you”). They gave responses on a scale of 1 = not at all to 7 = very much so.

Subjects’ prior attitudes toward the hotel and restaurant were also measured via a series of seven-point semantic differential scales: bad/good, unfavorable/favorable, and negative/positive (Osgood, Suci, & Tannenbaum, 1957). Cronbach’s alphas were .963 and .978 for attitudes toward the hotel and the restaurant, respectively. In addition, subjects were asked to indicate the realism of the stimuli on a seven-point Likert scale (1 = highly unrealistic and 7 = highly realistic).

RESULTS

Descriptive Results

Nearly two-thirds ($n = 119$) of the subjects were male. The average age of the subjects was almost 38, and the overall range was from 18 to 65. The majority of the subjects were married (55%) and have at least a Bachelor’s degree (81%). Only minority of the subjects, 5% and 3%, were divorced/separated or had only some high school education, respectively. Approximately 60% of the subjects earned at least 75K in annual household income. Overall, subjects represented both genders, were married, and tended to be relatively young, well-educated, and affluent.

Manipulation Checks

The manipulation checks shown in Table 1 (part A) indicate the hotel concept ratings were not significantly different among the six treatments ($p = .513$). Conversely, the restaurant was rated as more lively in the concept inconsistent condition than in the consistent condition ($M = 5.89$ versus 3.64, $p = .000$). As expected, the results from an ANOVA table show that a partnership between the hotel and a relaxing restaurant was perceived as more consistent than its exciting restaurant counterpart ($M = 4.76$ versus 2.76, $p = .000$).

Table 1
Manipulation Checks
A. Pre-Alliance Hotel and Restaurant Concept and Attitude

Consumption goals – Brand concept	Hotel		Restaurant	
	Concept	Attitude	Concept	Attitude
Hedonic goal:				
Relaxing – Consistent ($n = 28$)	2.32 \pm 0.67	5.20 \pm 1.29	3.68 \pm 0.98 _b	4.67 \pm 1.41
Relaxing – Inconsistent ($n = 31$)	2.35 \pm 0.80	5.05 \pm 1.12	6.06 \pm 1.06 _a	4.34 \pm 1.42
Excitement – Consistent ($n = 29$)	2.28 \pm 1.03	5.07 \pm 1.15	3.76 \pm 1.21 _b	4.23 \pm 1.34
Excitement – Inconsistent ($n = 28$)	2.04 \pm 0.79	5.38 \pm 1.22	5.61 \pm 1.47 _a	5.27 \pm 1.39
Utilitarian goal:				
Convenience – Consistent ($n = 29$)	2.31 \pm 0.93	5.33 \pm 1.08	3.48 \pm 1.18 _b	4.41 \pm 1.36
Convenience – Inconsistent ($n = 31$)	2.55 \pm 1.36	5.62 \pm 0.94	5.97 \pm 0.95 _a	5.16 \pm 1.44

To rule out prior attitudes as a confounding variable, we ran an ANOVA on pre-alliance attitudes. As shown in Table 1 (part B), consumers’ attitudes toward the hotel prior to the alliance were consistent for all treatments ($p = .364$). Conversely, the ANOVA results show that the attitudes toward the restaurant were significantly different among the three consumption goals ($p = .015$). However, Tukey’s multiple comparisons revealed that only the attitude toward an exciting restaurant was marginally more favorable than a relaxing restaurant under the excitement motivation ($M = 5.27$ versus 4.23, $p = .058$). In terms of the manipulation of consumption goal, t tests show that all scenarios were rated as realistic ($M = 4.53$, 4.96, 4.63, 5.50, 4.79, and 4.59 with all $ps < .05$). Furthermore, the follow-up comparisons from multivariate test show that

the consumption goal described in each scenario received significantly higher importance ratings than situation-irrelevant goals (all p s < .01). Hence, the independent variables were operationalized successfully.

B. Importance of Consumption Goal

Consumption goals – Concept consistency	Goal Manipulation		
	Relaxed	Excitement	Convenience
Hedonic goal:			
Relaxing – Consistent ($n = 28$)	6.21 \pm 0.63*	2.86 \pm 0.85	3.43 \pm 1.67
Relaxing – Inconsistent ($n = 31$)	5.97 \pm 0.98*	2.45 \pm 1.03	3.52 \pm 1.55
Excitement – Consistent ($n = 29$)	2.66 \pm 1.29	5.83 \pm 0.89*	2.97 \pm 1.57
Excitement – Inconsistent ($n = 28$)	3.50 \pm 1.11	5.43 \pm 1.00*	3.54 \pm 1.79
Utilitarian goal:			
Convenience – Consistent ($n = 29$)	5.17 \pm 1.42	3.38 \pm 1.70	6.21 \pm 0.73*
Convenience – Inconsistent ($n = 31$)	5.35 \pm 1.54	3.68 \pm 1.42	6.26 \pm 0.82*

Note. Concept was measured with a seven-point bipolar semantic scale (1 = calm, 7 = lively). Attitude ratings were made on three 7-point scales (bad/good, negative/positive, unfavorable/favorable). Importance ratings were made on 7-point scale (1 = not at all, 7 = very much so). Mean ratings in the same column that do not share subscripts differ at $p < .05$. * Mean rating in the same row is higher at $p < .05$ when it was compared to other goals.

Hypotheses Testing

To test H1a, an ANOVA was conducted on perceived fit with brand concept and consumption goals as between-subject variables. The mean ratings by experimental condition are shown in Table 2. The omnibus ANOVA test revealed a significant consumption goal by brand concept interaction ($p = .003$). Such a result shows that consumption goals do play a role in the evaluations of perceived fit in the hotel-restaurant alliance. Thus, H1a is supported.

To test the differential effects of hedonic and utilitarian goals, Tukey's multiple comparisons were used. In the utilitarian goal condition, brand concept resulted in significantly higher fit perceptions ($M = 5.60$ versus 3.66). For hedonic goals, a similar pattern of result was obtained when seeking relaxing experience was the salient goal ($M = 4.85$ versus 2.52 for consistent versus inconsistent concept, respectively). However, no statistically significant difference in perceived fit rating is observed in the exciting dining goal condition ($M = 4.74$ versus 4.38). Hence, H1b and H1c are supported.

Table 2
Perceived Fit Judgments as a Function of Consumption Goal and Concept Consistency

Hotel – Restaurant Concept	Consumption Goal		
	Relaxed	Excitement	Convenience
Relaxing – Relaxing (Consistent)	4.85 \pm 1.50	4.74 \pm 1.76	5.60 \pm 1.41
Relaxing – Exciting (Inconsistent)	2.52 \pm 1.32	4.38 \pm 1.64	3.66 \pm 1.96
Significant Effects (Tukey's test)	$p = .000$	$p = .961$	$p = .000$

Note. Perceived fit ratings were made on three 7-point scales (do not belong together/belong together, are not compatible/are compatible, do not fit well together/fit well together).

DISCUSSION

The research reported here is significant to the advancement of categorization research in two aspects. First, theories in the categorization literature generally suggest a stable, stimulus-dominated, or bottom-up representation of product. In contrast, the goal-driven categorization research offers a top-down perspective, in which consumers are flexible in changing their consumption patterns across different situations to achieve their consumption goals. Yet, some research findings point to the possibility that consumers employ a combination of goal-derived and stimulus-driven information in making judgments (Park & Hastie, 1987; Ratneshwar et al., 2001). The findings of this study provide additional empirical evidence to the joint effect argument. Specifically, our results consistently demonstrate that the evaluation of perceived fit between two entities, such as hotel-restaurant alliance in the service industry, is influenced by salient consumption goals acting in conjunction with stimulus-bounded inputs, such concept consistency.

Second, research in the goal-driven categorization has demonstrated that salient goals enhance the similarity judgment of products that are visually quite disparate (Park & Smith, 1989; Ratneshwar et al., 1996). Some research,

however, found some evidence that objects that highly resemble each other may be too rigid to preclude any goal intervention (Ratneshwar et al., 2001). Our results provide supporting evidence to the occurrence of alteration in the mental representations of product category. Hedonic goals, in particular, seem to facilitate assimilation of conceptually distinct partners. Nevertheless, we failed to show that salient goals influence similarity representations of concepts that are very alike. Neither a hedonic nor a utilitarian goal in our study could dissociate concepts that highly resemble each other.

In conclusion, our findings clearly suggest that both concept- and goal-driven inputs substantially affect category representations. These results certainly have promising implications for the hotel-restaurant brand alliance strategy. The joint influence of brand concept and goal salience on consumers' perceptions of fit indicates that hotel marketing practitioners may not limit their brand partners to those that share similar brand image. In fact, a significant number of hotels pair-up with restaurants whose brand concepts are highly distinctive (e.g., Marriott with Pizza Hut, Hilton with Damon's).

Nevertheless, the present findings suggest that marketing practitioners need to consider the psychological and functional consequences in promoting the hotel-restaurant partnership that involves distinct concepts. Specifically, emphasizing the functional benefits is not sufficient to "pull" the disparate image together. Instead, marketers may want to focus on the psychological benefits to consumers in such an alliance. For instance, Marriott hotel marketers may want to highlight casual and informal rather than price when the hotel partners with Pizza Hut.

Limitations and Future Research

We sought to make a contribution by demonstrating an empirical support for the hypotheses derived in part from the goal-driven theory, but we examined only a limited set of consumption goals and a specific aspect of concept consistency. Further research is needed for proving the generalizability of our results, as well as their ability to extend the underlying theory.

It is important to note that although we suspect a potential differential effect between hedonic and utilitarian goals, our study did not examine the conditions when utilitarian goals are unmet. Thus, the role of concept consistency in the context of unfulfilled utilitarian goal remains an empirical question. Further study investigating the information processes between hedonic and utilitarian goals is important to disclose how concept consistency and goal salience affect consumers' perceptions of fit. Having this said, the measures of perceived fit in this study may be too generic. Future research may want to explore the different underlying dimensions of fit to add to our understanding of brand alliances and their effectiveness.

Note that our research assessed only mental representations of products and did not measure consumers' attitudes, behavioral intentions, or actual product use behaviors. In addition, our study examines only consumers' reactions to the alliance, not the evaluations that occur when expectations are confronted by the reality of actual product experience. Hence, our results are suggestive of what may be desirable for the hospitality operators to try to achieve, not what may be feasible for it to accomplish through actual product performance. Researchers could investigate consumers' behavioral intentions and their response in the actual product experience.

Finally, hotel market segments are generally categorized into leisure, business, and convention types. The present study focused on leisure travelers and disclosed that restaurant brand recognition was not as important as expected. However, it seems plausible that business travelers do not usually spend a proportionate amount of time looking for a place to dine at. Familiarity and consistency of quality of a brand may be more critical to them. Furthermore, traveling with friends and with family or with the significant one for leisure purposes may lead to different aspect of brand in consumers' fit judgments. Thus, generalizability of the current results to business travelers or leisure traveling with different groups of people must be made with further study.

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DISCRIMINATION OF PERCEIVED IMPORTANCE OF TRAINING OF TRADESHOW EXHIBITORS BY PRIOR
TRAINING EXPERIENCE

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ABSTRACT

There are few empirical studies on the effectiveness of training program on exhibitors' performance and trade show exhibitors' need for training program. This study attempted to develop scales to measure the perceived importance of tradeshow training topics. Further, it examined exhibitors' unique training needs by prior training experiences. Sales strategy was the best discriminant predictor of tradeshow exhibitors' perceived importance of training topics between training experience group and non-experience group. The result shows the importance of training program development to meet exhibitors' needs. However, discriminant analysis indicated that predictors that have highly discriminant power have to be examined.

Key Words: tradeshow, exhibitor training program, training topics, discriminant analysis

INTRODUCTION

Friedmann (2004a) revealed that a large number of exhibiting companies did not focus on critical exhibiting techniques such as closing, follow-up, and lead management. Training programs offered by show management, on the other hand, dealt with the essential topics of tradeshow operations, but the programs still had limitations. Show managers planned training sessions without considering the characteristics of each exhibitor and their specific needs (Miller, 1997). This study will address this issue by identifying and examining critical topics that should be included in training programs for exhibitors. The results of this study will help tradeshow managers gain insight into appropriate content of exhibitor training programs. That insight will contribute to conducting more effective training sessions for tradeshow exhibitors. Training professionals have stated that content properly covering trainees' training needs is the crucial factor for a successful training program. Therefore, training needs for exhibitors should be identified. Concerning those issues, this study will discriminate the importance of training topics needed by exhibitors and how the perceived importance of training topics differ between training session experienced exhibitors and non-experienced exhibitors.

Effective Training Program

Experts suggested having training sessions before the shows in order to overcome the challenges from their lack of knowledge about tradeshows (Friedmann, 2004a, 2004b; Miller, 1999). Miller (1997) pointed that exhibitors failed simply because they did not have any type of written, measurable objectives for shows. Exhibitors who had clear objectives for exhibition performed better and are more successful (Kerin & Cron, 1987). Kern (1990) stated that exhibitors also needed to understand specific needs and interests of the show's buyers based on attendees' profile of the previous years. Tanner and Weilbaker (2001) also reported that the sales forces needed to identify profiles of various categories of buyers because the content of exhibit presentations was different based on the type of attendee. Booth etiquettes, greeting skills, demonstration/presentation skills, and preparing accurate show budgets were also considered as significant techniques that exhibitors had to obtain (Christman, 1991; Friedmann, 2004a; Shoham, 1999; Tanner, 2002).

Tannenbaum and Yukl (1992) suggested that factors like appropriate training methods, trainee characteristics, and accurate feedback about training program would contribute significantly to training effectiveness. First, the training method should guide the learner to the most appropriate encoding operations for storing information in memory. Also it should be adapted to differences in trainee aptitudes and prior knowledge as well. Second, learner's characteristics influence training efficiency. A training program is affected by factors like abilities and skills, motivation, attitudes, expectation and self-efficacy that a trainee has.

In addition to Tannenbaum and Yukl's three factors of training methods, trainee characteristics, and accurate feedback, researchers (Goldstein, 1980; Latham, 1988; McGehee & Thayer, 1961) have considered "training needs

analysis” as a key element that should be at the first step in the training program development process. A properly conducted training program yields information helpful to the development of instructional objectives and training criteria (Tannenbaum & Yukl, 1992). Wexley and Latham (2002) reported effective training began with a needs analysis to ensure that a training program addresses substantive issues and problems. According to Wexley (1984), needs assessment provides input by answering three important questions: (a) where within the organization can and should training be placed, (b) what an employee must learn to perform the job effectively, and (c) who within the organization needs training and of what kind in terms of skills and knowledge.

Content of training programs should concern trainee characteristics (Goldstein, 1980; Latham, 1988; Tannenbaum and Yukl, 1992). McEnergy and McEnergy (1987) revealed that training needs between employee and supervisor were different. Therefore, it is important to understand how training content differ based on trainee characteristics for more productive training programs. Feldman (1989) found that new employees had unique training needs, and formal training programs often failed to present appropriate content for new employees. Exhibitors who have not attended tradeshow before have different perceptions of exhibition (Miller, 1997). They usually have not only poor or incorrect knowledge of tradeshow but also wildly unrealistic expectations of tradeshow. The appropriate content of training programs should be different according to exhibitors’ prior experiences at shows.

Reasons for Exhibitor Training

Levinson et al. (1997) suggested that exhibitors be knowledgeable of their products and competitors, bring non-sales people who can answer the hard questions and train booth personnel for successful exhibition. Friedmann (1996) and Miller (1999) also advised training exhibitors and their booth staff to overcome challenges from the unusual situations of tradeshow. Show managers and exhibitors are under the relationship of sellers and customers. Several studies supported the promise that the customer education may provides advantages that apply to exhibitor training. Kern (1990) said that successful exhibitors were loyal exhibitors. Creating better alliances with exhibitors is an invaluable advantage of exhibitor training.

Recruiting new exhibitors is more expensive and time consuming than retaining current exhibitors (Friedmann, 1999). Retaining current exhibitors not only saves time and cost, but also makes the show stronger. Exhibitor turnover can have a negative effect on the image and reputation of a show. When dissatisfied exhibitors do not return, the bad reputation spreads to others. Eventually, the show is avoided by important exhibitors and may ultimately cease to exist. A high percentage of repeat exhibitors can contribute to show stability and relevance while keeping costs down (Skolnik, 1995). Twenty-nine percent of show managers who participated in Tradeshow Week Poll said that once they lose exhibitors, they would never regain them (Tradeshow Week, 2001).

Friedmann (2004b) conducted a survey to examine in depth the role and makeup of exhibitor education as conducted by show management. The study showed that exhibitor training made a positive impact on overall exhibition outcome. Fifty percent of show managers who participated in the survey believed that training reminds teams of necessary exhibiting skills. Other respondents said that training enhanced team spirit (20%), formed a cohesive team (10%), and increased number of leads gathered (10%) (Friedmann, 2004b, p.23). She stated that the exhibitor training also raised the level of professionalism on the show floor.

METHODOLOGY

Questionnaire

The initial questionnaire was reviewed by professionals in the exhibition industry and professors of the Convention, Tourism Administration Department at the University of Nevada, Las Vegas (UNLV) for validity, wording, format, etc. The questionnaire was then pre-tested with graduate students in Hotel College at UNLV. The current study’s design was intended to identify training topics for exhibitors and their staff to maximize their experience at a tradeshow. A list of training topics was developed based on the review of literature (Siskind, 2003; Tanner, 2002; Shoham, 1999; Christaman, 1991; Kern, 1990).

The questionnaire was designed to measure exhibitors’ level of knowledge of each training topic and the importance of each training topic in their tradeshow performance. The questionnaire consists of two sections. The first section examined perceived importance of 25 topics. Exhibitors were asked to indicate the degree of importance of each topic toward training. A five-point scale was also used for the importance section (5 =very important, 4 =important, 3 = neutral, 2 = not so important, 1 = not at all important). The second section asked respondents to report demographic information and their training experience.

Data collection and analysis methods

The subjects for this study were a convenience sample of exhibitors at 2004 Global Gaming Expo (G2E). A total of 369 exhibitors received the questionnaire. After a self-administrated interview method, a total of 246 valid subjects were obtained in order to analyze. The response rate was 62.1%. After screening the data, the data was analyzed by using SPSS (version 12.0.1). Factor analysis was used to extract significant factors of 25 training topics. Discriminant function analysis was used to discriminate the significant importance of training topics between training session experience group and non-experience group.

RESULTS

Description of the sample

Over 73 percent of the respondents were male and 25.7 percent were female. 37.9 percent of the participants reported having over six years of tradeshow exhibition experience. Almost a third of the respondents had less than three years of tradeshow exhibition experience. Over 60 percent of the total respondents preferred to have training sessions one to three months before the show. Training at the show was the second most popular time for exhibitors. The category, multiple times, included the respondents who wanted to have training sessions more than one time. For example, some respondents liked to have training sessions at the show as well as one to three months before the show.

The number of respondents who preferred to have training sessions one to three months before the show included 64.5 percent of respondents who had less than three years of tradeshow experience and 63.2 percent who had more than six years of tradeshow experience. The number of respondents who preferred to have training sessions at the show included 16.2 percent of respondents who had less than three years of tradeshow experience and 18.4 percent who had more than six years of tradeshow experience. In addition, the number of respondents who preferred to have training sessions three to six months before the show. In addition, the number of respondents who preferred to have training sessions three to six months before the show included 8.1 percent of respondents who had less than three years of tradeshow experience and 2.3 percent who had more than six years of tradeshow experience.

Over 37 percent of the total respondents reported that they had been provided training sessions by their companies. Only about 16 percent of the total respondents had experience of having training sessions provided by show management. Only 10.8 percent of the total respondents who had less than three years of tradeshow experience reported having training sessions provided by the show management. Over 50 percent of respondents with over six years of tradeshow experience reported having training sessions provided by the company, while 24.4 percent had training sessions conducted by the show management.

Importance of training topics

For the reliability of the 25 items, values of items-total correlation and alpha if item deleted were considered. According to the result, each item showed from .877 to .884. (Kaiser-Meyer-Olkin Measure = .857, Bartlett's test of sphericity = 1550.559, $p < .005$). Thus, each item secures the reliability as a measurement scale. Then, the standardized score of each item was used for factor analysis was conducted to make those items into easily manageable measurements. For training needs analysis, the importance of job tasks toward training is considered appropriate measurement and the importance is usually used (Jonassen, Tessmer, & Hannum, 1999; Wexley & Latham, 2002). Varimax rotation used for 25 items and then four distinct factors were extracted which have eigenvalues above 1. The percent of total variance explained of six factors are 57 percent and factor 1 has the highest explanatory power among them. Factor loadings of each item are all above $\pm .4$, and commonality is all above .4. Factor 1 was named as sales strategy, Factor 2 as booth management, Factor 3 as show promotion, Factor 4 as show information, Factor 5 as staff performance, and Factor 6 as show planning

Discriminant training topics between training session experience group and non-experience group

A direct discriminant function analysis was performed using the six factors as predictors of the importance of training in two groups. Predictors were sales strategy, booth management, show promotion, show information, staff performance, and show planning. Groups were training session experience group and non-experience group. Of the original 246 cases, 5 cases were identified as multivariate outliers with $p < .005$, and were deleted. For the remaining 241 cases (91 training session experience group and 150 training session non-experience group), Box's M test of the assumption of homogeneity was conducted.

For the data, the test is significant so we conclude that the groups do differ in their covariance matrices (Box's $M = 51.737$, $p < .005$) However, discriminant analysis is robust even when the homogeneity of variances assumption is not met, provided the data do not contain important outliers. One discriminant function was calculated, with a combined $_2(6) = 13.254$, $p < .05$. Wilk's lambda shows the function is significant (Wilks' lambda = .929, $p < .05$). The loading matrix of

correlations between predictors and the discriminant function suggests that the best predictor for distinguishing training session experience group and non-experience group is sales strategy. Training session experience group perceived the importance of sales strategy more highly (mean=.27, SD=.82) than non-experience group (mean= -.19, SD=1.08). There was a statistically significant mean difference in the predictor, sales strategy, between the two groups ($t=3.269$, $p<.005$). Generally, training session experience group perceived the importance of booth management, show promotion, show information, staff performance, and show planning higher than non-experience group. However, there were no statistically significant mean differences in each predictor respectively between two groups at the significance level of .05.

Table 1
Discriminant analysis between two groups

	Standardized canonical discriminant function coefficients	Classification function coefficients	
		Training session Experience group	Training session Non-experience group
Sales strategy	.845	.283	-.199
Booth management	.205	.061	-.053
Show promotion	.380	.146	-.068
Show information	.078	.046	.002
Staff performance	.330	.102	-.083
Show planning	.111	.020	-.042
constant	-	-.967	-.541
		Function at group centroids	
		.336	-.226

Wilks' lambda=.929, $\chi^2=13.254$, $p<.05$

With the use of a classification procedure for total usable 241 exhibitors, 152 were classified correctly. 63.1 percent classification rate was achieved by classifying a disproportionate number of cases as non-experience groups. This result can compare with random assignment. Prior probabilities, specified as .598 (non-experience group) and .402 (experience group), put 144 cases (.598 x 241) in the non-experience group. Of those randomly assigned to the non-experience group, 86 (.598 x 144) cases should be correct, while 36 (.402 x 91) cases should be corrected by chance. Overall, the two groups, 122 should be correct by chance alone. This is not a satisfactory discriminant analysis.

CONCLUSION AND DISCUSSION

This study attempted to discriminate the importance of training session topics between training session experience group and non-experience group. Six factors concerning the importance of training session topics were extracted. The result showed that Sales Strategy was the most important factor in explaining training topics. To examine the discriminant factor between training session experience group and non-experience group, discriminant function analysis was used. The factor Sales strategy was determined as the best predictor of perceived importance concerning the training session topics between the groups. Generally, the trained group considered the training session topics more important than the non-trained group. However, the result of classification was not satisfactory. Thus, training session topics with highly explanatory discriminant power have to be developed.

This study extracted the six training topics and these factors were appropriate in measuring the experiential differences between training session experience group and non-experience group. The underlying factors are useful in developing a discriminant function model of perceived importance of training topics. Trained exhibitors and non-trained exhibitors indicate a higher degree of Sales Strategy. However, non-trained exhibitors considered the factors negatively except Show information. The results of the present study suggest perceived importance of training topics may be one component of a theory for tradeshow exhibitor training program.

As with any study there are limitations. The convenience nature of the sampling procedure limits generalizations to the tradeshow exhibitors. In addition, this study chose the single show, G2E. Because of short of researches concerning trade show training program, the measurement of perceived importance of training topics have to be tested its applicability in the future. The value of the present study lies in discrimination of the perceived importance in training topics between the trained exhibitors and non-trained exhibitors. It can be used in explaining performance differences in the tradeshow and the need of training sessions. The present study may also affect trade show managers and trade show training program

developers. Appropriate training programs for training session experience group and non-experience group have to be developed to meet the each group's need.

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SELLING THE DESTINATION RESORT: PERMISSION MARKETING AND THE INTERNET

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ABSTRACT

Permission marketing is becoming an important tool in attracting consumers via the Internet. Its growing importance can be seen in hospitality and tourism marketing, specifically in destination resort marketing. With an increase in industry use, there exists a need to develop a better understanding of consumers and reaching them online by permission marketing techniques. This paper identifies and describes three segments of consumers based upon their willingness to engage with permission marketing, and then compares them on socio-demographics, online habits, trip characteristics, and Website design preference levels. Implications are presented for marketing destination resorts.

Key Words: Destination Resort Marketing, Permission Marketing, Tourism Marketing, Consumer Comparisons

INTRODUCTION

Successfully marketing a product to the appropriate consumer group is a key component to the overall success of a destination resort. With such significance placed upon marketing, researchers have taken a direct interest in its function. From identifying factors important to marketing a mid-priced resort (Knutson et al., 2004), to the dissection of a specific consumer market such as the Baby Boomer generation (Johanson et al., 2001), marketing a product to the consumer has been the focus of both far-reaching and exacting objectives. Research has also been conducted on the opinions of the marketing function among professionals in the field (Woods & Hu, 2002), marketing the timeshare product (Chiang, 2001; Scavo, 1999) and marketing a specific type of resort, the spa (Monteson & Singer, 2004). But as researchers have taken a proactive approach to analyzing various aspects of marketing resorts, a portion of the puzzle has been omitted: the use of the Internet for permission marketing.

Permission marketing, which has also been called “opt-in” marketing, represents a technique based upon garnering initial customer consent to receive information about a product or services from a company (Marketing Terms.com, 2004). The technique, considered an excellent venue for successfully reaching consumers, has not garnered attention from researchers interested in the marketing of destination resorts. Without current research investigating this topic, there exists a lack of information on permission marketing by lodging properties. This research begins to resolve this lack of data by providing a greater understanding of permission marketing. Analyzing data concerning consumer’s willingness to supply information online, this study’s two research objectives were to:

1. Segment groups of consumers based upon the levels of permission they supply to Websites.
2. Examine the differences among the groups including socio-demographics, trip characteristics, online habits and behaviors, and Website design preferences.

Based upon these objectives, the outcomes of this study provide an understanding of consumer’s willingness to supply contact information, the methods of collected data for permission marketing purposes that are most successful, and a comparison of the characteristics of the groupings. These findings are then applied in a destination resort context and applications for resort marketing professionals are discussed along with future research opportunities.

Permission Marketing

Most mass media venues do not allow marketers to target consumers with a high degree of precision, even though targeting and segmenting is arguably the centerpiece of the marketing concept (Krishnamurthy, 2001). With this difficulty existing, one of the most recent approaches to direct marketing focuses on consumers' preferences and developing a meaningful interactive dialogue (Kent & Brandal, 2003). One such proposed technique is permission marketing (Godin, 1999), which seeks permission in advance from consumers to send marketing communications. Consumers provide interested marketers with the information about the types of advertising messages they would like to receive. The marketers then use this information to target advertisements and promotions to the consumer. The aim is to initiate, sustain and develop a dialogue with customers, building trust and over time lifting the levels of permission, making it a more valuable asset (Kent & Brandal, 2003). Godin (1999) states:

Consumers are now willing to pay handsomely to save time, while marketers are eager to pay bundles to get attention... The alternative is Permission Marketing, which offers the consumer an opportunity to volunteer to be marketed to. By talking only to volunteers, Permission Marketing guarantees that consumers pay more attention to the marketing message (p. 42-43).

This technique is seen as reducing clutter and lowering search costs for the consumer while increasing the targeting precision of marketers (Godin, 1999; Krishnamurthy, 2001; Marinova et al., 2002). This is accomplished by obtaining trust and building a two-way relationship with consumers.

Permission marketing has three specific characteristics that set it apart from traditional direct marketing (Godin, 1999). First, customers who permit their names to be included on direct-mail lists can anticipate receiving commercial messages (anticipated); second, the sending company can personalize those messages (personal); and third, the messages will be more relevant to the customers' needs (relevant) (p. 49). These characteristics are what allow marketers to cut through the clutter and speak to prospects as friends, not as strangers. This personalized, anticipated, frequent, and relevant communication has a greater impact than a random message displayed in a random place at a random moment (Godin, 1999). Five levels of permission can be won from customers targeted by a permission-marketing campaign. These levels include:

- "Situation" permission is a one-time or limited-time permission, which is the least potent of the five levels. This is given when consumers agree to receive sales or promotional messages from a company for a specified time.
- "Brand trust" is the most common way marketers practice their craft. With this permission, consumers have developed confidence in a product or service that carries a particular or well-known brand name.
- "Personal relationship" uses individual relationships between the consumer and marketer to temporarily refocus the attention or modify the consumer's behavior. This approach is the best technique to sell customized or highly-involving products.
- In the level of "points permission," points are a formalized, scalable approach to attracting and keeping the prospect's attention. This involves consumers allowing the company to collect personal data and to market its products and services to them on a points-based loyalty scheme.
- "Intravenous" refers to the highest level of permission to be won from consumers. This involves customers trusting the marketer to make buying decisions for them.

According to MacPherson (2001), one of the theories behind permission marketing is that, presumably, a customer who has given permission to receive promotions is a better, more loyal and more profitable customer. It entails a shift in power from the marketer to the consumer. Consumers' permission has to be sought, which allows consumers to realize the power in the data they can provide (Kent & Brandal, 2003).

Krishnamurthy (2001) also points out that the concept of permission marketing is closely related to two concepts that have been discussed extensively in the marketing literature - relationship marketing (Sheth et al., 2000) and one-to-one marketing (Peppers & Rogers, 1993). Relationship marketing proposes that marketers must focus on long-term relationships with customers rather than single transactions. The main idea of one-to-one marketing is that marketers must think of a segment as one person and customize the marketing mix to each customer. He also adds that while "permission marketing" was coined by Godin, the generalized concept of customer permission in direct marketing had been previously discussed in the context of privacy issues.

Permission Marketing and the Internet

According to Farris (2001), permission marketing has mainly been adopted by organizations practicing 'digital marketing', such as database marketing, Internet marketing, and e-mail marketing. E-mail in particular can be integrated

into a one-to-one medium, with a more interactive, multi-layered communication process. MacPherson (2001) describes permission based e-mail marketing as being the future of direct marketing with benefits including direct communication with prospective and existing customers, interactivity, lower costs, and the targeting of qualified leads.

In the early stages of Internet marketing, banner advertising and sponsorships were considered to have the potential to provide consumers with relevant information. Despite the early promise detailed in pioneering research (Hoffman & Novak, 1996), click-through rates have not improved and average approximately 0.5%. Moreover, a recent eye-tracking study presents troublesome evidence that Internet users may avoid looking at banner ads during online activities (Dreze & Hussherr, 2003). In this sense, it may reasonably be assumed that placing banners on Websites may be an ineffective way of delivering the message.

Given these current issues of marketing to the online audience, researchers argue that permission marketing offers improved targeting by helping consumers interface with marketers most likely to provide relevant promotional messages (Chittenden & Rettie, 2003; Godin, 1999; Kavassalis et al., 2003; Krishnamurthy, 2001). Although permission marketing can be implemented in any direct medium, its use has increased with the advent of the Internet and e-commerce. The emergence of permission marketing in tandem with the Internet is based upon the low cost of marketer-to-consumer communication on the Internet (Hoffman & Novak, 1996; Shiman, 1996). The development of the Internet has also enabled rapid feedback mechanisms allowing instantaneous two-way communication (Hoffman & Novak).

An additional reason for executing permission marketing techniques via the Web has been the failure of the direct mail approach of sending unsolicited promotional messages. The primary example of this is unsolicited commercial e-mail or "Spam" as it is widely known (Cranor & LaMacchia, 1998). Despite the enormous amount of spam disseminated on the Web, this method cannot be a legitimate form of marketing communication (Shiman, 1996). It would lead to an excessive message volume for consumers, weakening of brand reputation and a slowing of the entire network. In this sense, permission marketing can be seen as a feasible alternative for Internet marketing communication.

Accompanying the expansion of the literature on Web-based permission marketing has been the exponential growth within industry, specifically in the destination resort sector. While this direct method of marketing to consumers is purported to be successful in comparison to other Web-based marketing techniques, relatively little is known about its applications in hospitality and tourism. Based upon this information gap, this research should establish a better understanding of the end user of permission marketing materials by segmenting and comparing various consumer groups.

METHODOLOGY

The data utilized in this study were from the *Internet Tourism & Travel 2001 Study* conducted for the Canadian Tourism Commission (CTC). An online survey was conducted among 2,470 North Americans in the U.S. and Canada (iTravelers) between November 8th and December 18th, 2001. To project the findings relative to destination resorts, which have been identified as lodging facilities (Baum & Mudambi, 1998; Dwyer et al., 1998; Milman, 1997; Pope, 2001), respondents who indicated that they had used the Internet to decide on accommodations in the last 12 months were selected. A sample of 1,066 qualified respondents resulted.

Questions that sought responses as to when respondents provided their name or e-mail were the primary measures for the analysis. The measures were: "given name/email to personalize a site", "given name/e-mail to obtain a login or password", "given name/e-mail to subscribe to a newsletter", "given name/e-mail to receive notification of discounts", "given name/e-mail to enter a contest", "given name/e-mail to purchase online", and "given name/e-mail to request a travel brochure." The responses were either yes or no. These questions were selected based upon the assumption that a company would receive access to a consumer for permission marketing activities.

Several statistical techniques were applied to analyze the data. Cluster analysis, which allowed the researchers to group consumers based upon similar characteristics, was used to identify the clusters or like groups of respondents (Hair et al., 1998). Discriminant analysis was used to validate the clusters. After the clusters were identified, each segment was profiled based on the type of channels that respondents were willing to provide name/e-mail, and the total number of channels used by respondents in each cluster. Chi-square analyses and one-way ANOVAs were conducted to test for significance and determine if the three segments were significantly different. Multinomial logistic regression, which analyzes the relationship between independent and dependant variables (Hair et al., 1998), was then used to compare the socio-demographics, online habits, trip characteristics, and Website design preferences related to accommodations for the three clusters.

The socio-demographic characteristics included age and income. The statements that measured online habits were “How many hours, in total, do you personally surf/browse the Internet for work or personal reasons in an average week?” and “How long have you been using the Internet to surf/browse the World Wide Web?” The trip characteristics were “How many vacation, leisure or get-away trips have you taken in the past 12 months (since September 2000)?”, “Number of nights away from home?”, “How many hours in total, did you spend on the Internet planning/researching your trip?”, “Did you have any destination in mind when you started planned on the trip?”, “How much did you spend”, and “Where was the destination?” As this study examined destinations within North America, the responses for “Where was the destinations” were recoded to either “within state/province” or “out of state/province but within North America.” To measure Website design preferences, principal components factor analysis was used to reduce the original ten questions into fewer dimensions. The results of the principal components analysis indicated four factors, which were “accommodation should be presented in video/virtual tour/flash”, “accommodation should be presented in price/ratings”, “accommodation should be presented in objective information”, and “accommodation should be presented in text pictures.”

Sample Characteristics

Approximately 57.7 percent of the respondents in the sample were female (Table 1). Around 59 percent of the respondents were between 35 – 54 years old with the majority between 45 – 54 years old. Half of the respondents (52.3 percent) had annual household incomes of more than \$60,000. About 21.4 percent of the respondents had household incomes of \$40,000-\$59,999. The majority of respondents (39.4 percent) graduated from university/college/technical school, and approximately 20 percent had postgraduate education.

Table 1
Descriptive Profile of the Sample

Type	Percentage	Type	Percentage
Gender		Annual Household Income	
Male	42.3	Less than \$15,000	3.5
Female	57.7	\$15,000 - \$24,999	7.1
Age		\$25,000 - \$34,999	15.8
18 to 24	2.6	\$40,000 - \$59,999	21.4
25 to 29	7.5	\$60,000 - \$79,999	18.5
30 to 34	10.4	\$80,000 - \$99,999	12.7
35 to 39	13.5	\$100,000 - \$149,999	12.3
40 to 44	14.4	\$150,000 – \$199,999	4.7
45 to 49	15.8	\$200,000 or more	4.1
50 to 54	15.3	Education	
55 to 59	10.4	Less than high school	0.4
60 to 64	6.0	Some high school	2.5
65 to 70	2.7	Graduated high school	11.5
71 or older	1.3	Some university/college/ technical school	25.8
		Graduated university/college/ technical school	39.4
		Postgraduate	20.4

RESULTS AND DISCUSSION

Cluster analysis results

The results of the cluster analysis identified three groups of respondents. The three-cluster solution was validated with a more stringent canonical discriminant analysis, which showed significant differences among the three clusters in all seven variables with $p < 0.000$. In a multiple discriminant analysis, if there are K groups, K-1 discriminant functions will be estimated. Since this study identified three clusters, two functions were estimated. As indicated in Table 2, the overall Wilks' Lambda statistics illustrated the significant differences with $p < 0.000$. A classification procedure within discriminant analysis had 97.4 percent accuracy in predicting membership of the three groups.

The three groups identified from the cluster analysis were labeled as recurrent (RG), typical (TG), and occasional (OG). These groupings and names reflected the propensity to supply names/e-mail addresses while visiting Websites. The ANOVA results demonstrated that the three clusters were significantly different in terms of the total number of the

channels to which respondents were willing to provide their names/e-mail addresses while visiting a site (Table 3). The Chi-Square results confirmed significant differences among the channels used by the three clusters (Table 3).

Table 2
Result of the Canonical Discriminant Functions

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	0.054	3089.520	14	0.000
2	0.289	1315.765	6	0.000

For the recurrent group (RG), the average number of channels that respondents were willing to give names/e-mails on the Internet was the highest with an average of 5.93 channels compared to the typical group's (TG) 4.15 channels, and the conservative group's (CG) 2.87 channels. All the RG respondents were willing to give their names/e-mails on the Internet to request a travel brochure. Besides requesting a travel brochure, the primary channels that RG respondents were willing to provide their names/e-mails were to obtain a login or password, to enter a contest, to subscribe to a newsletter, and to receive notification of discounts.

The two primary purposes for the TG group to supply their names/e-mails were to obtain a login or password and to enter a contest. None of the TG respondents were willing to provide their names/e-mails to request a travel brochure. For the OG, the primary channels to which respondents were willing to provide their names/e-mails were to request a travel brochure and to obtain a login or password.

Table 3
Profiles of the Three-cluster Solution

Variables	Recurrent n = 604	Occasional n = 224	Typical n = 238	Total	F/Chi-Square*
No of channels respondents willing to give name/e-mail	5.9288	2.8705	4.1471	4.8884	944.240
Given name/e-mail to personalize a site	182 (30.1%)	31 (13.8%)	40 (16.8%)	253 (23.7%)	32.087
Given name/e-mail to obtain a login or password	578 (95.7%)	137 (61.2%)	214 (89.9%)	929 (87.1%)	176.093
Given name/e-mail to subscribe to a newsletter	562 (93.0%)	90 (40.2%)	170 (71.4%)	822 (77.1%)	264.361
Given name/e-mail to receive notification of discounts	554 (91.7%)	52 (23.2%)	189 (75.6%)	786 (73.7%)	396.542
Given name/e-mail to enter a contest	571 (94.5%)	50 (22.3%)	200 (84.0%)	821 (77.0%)	489.932
Given name/e-mail to purchase online	530 (87.7%)	113 (50.4%)	183 (76.9%)	826 (77.5%)	130.391
Given name/e-mail to request a travel brochure	604 (100%)	170 (75.9%)	0 (0.0%)	774 (72.6%)	885.994

*p - values = 0.000

There was no significant difference among the three groups for the purpose of the most recent vacation trip, but significant differences were found in terms of trip patterns of the most recent vacation trips. In general, about 35.3 percent of all respondents indicated that the main purpose for the most recent vacation trip was entertainment, followed by outdoor recreation (17 percent), personal (10.9 percent) and education, heritage and culture (7.2 percent). In terms of trip patterns, about 29.2 percent of the RG indicated that the most recent vacation trips were more of a city trip, compared with only 16.5 percent of the OG. Also, about 30.4 percent of the TG stated that their most recent vacation trip was for visiting friends and family, while only 20.1 percent of the OG indicated that their most recent vacation trip was a visit to friends and family.

Multinomial logistic regression results

The results of the multinomial logistic regression indicated that there were significant differences among the three groups (RG, TG, OG) based upon their socio-demographics, online habits, trip characteristics, and Website design

preferences. The results showed a statistically significant difference among the three groups with a Chi-square = 167.626 and a p-value of less than 0.001 (Table 4).

For the RG, the odds of the number of hours online per week among these respondents were 1.134 times greater when compared to the TG (Table 4). The odds of the number of vacation trips in the last year among those in the RG were 1.245 times more than for the TG. The odds of the number of hours spent in online research/planning for the last recent vacation trip were 1.3 times greater than for the TG. Generally, the RG were more likely to spend additional hours online per week, have taken more vacation trips in the previous year, and have spent more hours online to research and plan previous vacation trips.

In terms of accommodation design preferences, those in the RG were 1.38 times more likely to prefer video/virtual tours and flash, 1.149 times more likely to prefer price/ratings on Websites, and 1.180 times more likely to prefer objective information on Websites when compared to those in the OG (Table 4). RG members were also more likely to prefer accommodation sites to be presented in video/virtual tour/flash, prefer price/ratings to be included, and prefer objective information in presenting accommodation information when compared to the TG. When compared to the OG, the RG tended to spend more hours online per week and devoted more hours to online researching/planning for previous vacation trips. However, they were less likely to spend a longer amount of time on previous vacation, and also less likely to vacation within their home state or province.

Table 4
Results of the Multinomial Logistic Regression

Predictors	I-Reference Group Typical (TG)		II-Reference Group Occasional (OG)	
	Recurrent (RG)	Occasional (OG)	Recurrent (RG)	Typical (TG)
Socio-demographic				
Age	1.063	1.066	0.997	0.938
Annual income	1.023	1.007	1.016	0.993
Online habit				
Hours spend online per week	1.134**	0.720***	1.574***	1.388***
Time began online	1.053	1.154*	0.912	0.867*
Trip characteristics				
Number of vacation trips in the last year	1.245***	1.188**	1.047	0.841**
Number of nights away on recent trip	0.998	1.067**	0.935***	0.937**
Hours spent online research/planning last vacation trip	1.300***	1.041	1.248**	0.961
Destination in mind when you started planned on the last vacation trip	1.096	1.254	0.874	0.797
Money spent on most recent trip	0.961	0.998	0.962	1.002
Destination of the last vacation trip	0.924	1.416*	0.652**	0.706*
Website design preferences (accommodation)				
Accommodation should be presented in video/virtual tour/flash	1.380***	1.166	1.183*	0.857
Accommodation should be presented in price/ratings	1.149*	1.031	1.114	0.970
Accommodation should be presented in objective information	1.180*	1.013	1.166*	0.987
Accommodation should be presented in text pictures	1.067	0.978	1.091	1.023
LR Chi Square	167.626***			
Log Likelihood	1848.465			

N=1022, *p< 0.10 **p< 0.05 ***p< 0.001

The OG tended to spend fewer hours online per week but took more vacation trips in the last year when compared to the TG (Table 4). Additionally, the OG was more likely to spend more time at a destination and stay online longer when compared to those in the TG. In addition, the OG was more likely to have taken their last vacations within the home state or province than those in the TG.

IMPLICATIONS

Based upon these findings, there are several important implications for destination resort marketers. The first is the identification of distinct online consumer groupings: recurrent, typical, and occasional. The labels attached to these groups reflect the degree of potential access that marketers have to consumers to collect contact information. These groupings supply an initial context in which further exploration of permission marketing can be conducted in tourism and hospitality. While the current study does not provide an in-depth analysis of the three groups, the findings indicate meaningful differences among them.

The second finding is the variation in willingness to supply information for specific information purposes. There was only one channel to which more than 60 percent of all three groups were willing supply their information; to obtain a login or password. The RG were willing to provide their names/e-mails to five of the six other channels. The TG was generally less willing to provide their details than the RG, but a majority would do so for four of the six other six channels. The OG was the most reluctant to supply their details, with a majority willing to do so for just two of the other six channels. This indicates that resorts should develop their websites in three alternative strategies to collect permission marketing information: primarily rely upon the login/password method, advancement of current methods, or develop new avenues. The first strategy would be to increase the effectiveness of the most popular method for catching consumer's information, the login/password system. This could be accomplished by providing additional incentives for logging in or simplifying the procedure (i.e., collecting only the consumer's name and e-mail address). The second and third direction would be to address the lack of consistency in effectively collecting consumer information. A resort website could supply a variety of channels to effectively collect information from consumers, either that discussed in this study or through development of new methods.

The third finding directly relates to the fact that information can only be collected successfully from all consumer groups through one channel, the login/password method. This channel represents only the first level of permission as described by Godin (1999), the situational level. Although marketers possess a direct link to the consumer via this channel, resort companies need to further explore avenues in which communication at a higher level can be established. A resort's goal should be the highest, intravenous level, where they can make the decision for the consumer. But as the feasibility of this option is uncertain, the point's level, which is second highest, may be a more realistic goal. This is where a resort can collect personal information to make specific suggestions to the consumer. Upon attaining this level of trust between the marketer and consumers, the resort would have greater influence to "suggest" those products in which they want consumers to actively participate.

Besides these significant differences, the basic characteristics of each group also require some contemplation. The RG is the group most likely to supply contact information to a Website and require the greatest amount of objective information in technologically-advanced ways, but every individual stated they requested a brochure in the mail. This suggests that although the Web is a powerful source of information, traditional print collateral materials are still required by these Internet-savvy consumers. The finding that the OG was inclined to request brochures, but none of the TG consumers did the same is also of interest. This is intriguing since the OG spend more time online but are less inclined to supply contact information than the TG.

Future Research

This research study analyzed seven channels used to collect information to pursue a permission marketing agenda. Three primary groupings of consumers were identified and compared, and this analysis should be useful for future related studies. While these have the promise in contributing to the exploration of permission marketing for destination resorts, there are additional avenues for future research. First, since destination resorts are primarily driven by the leisure market (Knutson et al., 2004), subsequent studies should directly analyze destination resort consumers. Using the *Internet Tourism & Travel 2001 Study* has allowed inferences to be made for destination resorts, but with a pooled sample of business and leisure travelers. Second, the permission marketing function from an operator's viewpoint should be investigated. Specifically, some questions of considerable interest are: How many resorts are using permission marketing? Is it successful in converting greater business shares through looking to booking; and are marketers achieving high return-on-investment? Third, consumer perceptions of permission marketing materials should be analyzed through questions including: Do consumers regret supplying their information online after being marketed to; and which method is the

most/least successful? A substantial contribution for academics and practitioners will be made by considering these and other relevant questions in future research.

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CHEFS' ATTITUDE TOWARD FOOD IRRADIATION

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ABSTRACT

This exploratory study is to investigate the chefs' collective level of knowledge about emerging food safety technology. The study focuses on chefs of independent restaurants who are empowered to purchase food products of their choice without the influence of a superior. Chefs play important roles in the food industry since their activities can have direct impact on people's health, cost of medical care, and national economy. The results shall reveal the level of knowledge chefs have and shall stimulate further research to determine whether sufficient educational information about food irradiation is being disseminated to the foodservice industry, consumers and academia.

Key Words: Irradiation, food safety, foodborne illnesses, emerging technologies

INTRODUCTION

An estimated 76 million cases of foodborne diseases, resulting in more than 325,000 hospitalizations and 5000 deaths, occur in the United States annually (CDC, 2002). Important sources of foodborne pathogens include contaminated produce and improperly cooked, handled, or stored meat, dairy, and poultry products. The meat and poultry industry's efforts at surveillance and intervention have reduced, but not eliminated, microbial contamination of meat and poultry carcasses (FSIS, 2004). Despite these efforts, preventable illnesses and even death continue to occur. Future trends may force all food industries to adopt stringent safety measures as a result of effective implementation of emerging technologies to ensure protection of consumers' health. The use of food irradiation is at crossroads in the United States and good opportunities for large-scale implementation of the technology are emerging (Osterholm, 2004). As emerging contributors to customers' health and safety, chefs could play important roles in promoting consumers' acceptance of irradiated foods. Food irradiation is a technology that can be safely used to reduce food losses due to deterioration and to control contaminations that cause illness and death (Bruhn, 2000).

As of March 2003, the use of irradiation to treat foods has been approved by more than 50 countries including such technologically advanced countries as Canada, France, Japan, The Netherlands, Belgium, South Africa and the United States. Irradiation equipment and services are offered by about 91 suppliers in 32 countries. In the United States, irradiation of food was first approved for spices and seasonings in 1963. Since then, irradiation has been approved for the safety use and consumption of many food items and other non food items.

The approved items for irradiation by the FDA and other US government agencies are dog food, flour, spices, vegetables, fruit, grain products, shell eggs, seafood, red meat-beef, poultry and lamb. The World Health Organization (USGAO, 2000) reviewed the findings of over 500 studies conducted over 50 years and concluded that irradiation of food has the potential to decrease the incidence of foodborne disease dramatically. This conclusion is supported by over 40 organizations.

Several food irradiation studies have investigated consumers' perception, level of knowledge and acceptance of new food safety technologies (Bennett, 2000). However, chefs' opinion on the use of this technology has never been considered before. Since chefs could play important roles in promoting consumers' acceptance of irradiated foods, this study was undertaken to explore their level of knowledge about this emerging food safety technology. It focused on chefs of independent restaurants who are empowered to purchase, store, produce and merchandise food products of their choice without the influence of a superior. In this study, the authors attempted to connect chefs' knowledge about food irradiation to what role they may play in the future. The ultimate goal is however, to establish a base to improve the chefs' understanding by exposing them to the subject matter being investigated. With the dissemination of the results of this study,

chefs can be prepared and encouraged to research and increase their level of knowledge about this emerging food safety technology.

LITERATURE REVIEW

The first commercial use of food irradiation occurred in 1957 in Stuttgart, Germany, when a spice manufacturer decided to improve the hygienic quality of his product by treating it with accelerated electrons produced by a Van de Graaff electron accelerator. In December 1988, a number of UN agencies, namely the Food and Agriculture Organization (FAO), World Health Organization (WHO), IAEA, ITC and GATT (now renamed WTO), sponsored the International Conference on the Acceptance, Control of, and Trade in Irradiated Food in Geneva. The 220 official delegations from 57 countries for this conference were comprised of government officials, experts in international law, health, energy, and food, and representatives of consumer unions. An International Document on Food Irradiation was adopted by consensus, which made recommendations on inter-governmental and governmental activities, process control and trade. However, each year, about thousands of tons of food products which are often considered commercially confidential are irradiated worldwide, notably in The Netherlands, France, Belgium, South Africa and Ukraine, without strict controls. It is reported that the grain irradiator in the port of Odessa, Ukraine, disinfests about 300,000 tons of grain per annum. Canada, Hungary, Japan, Thailand and USA are some of the other countries where foods are commercially irradiated. Food irradiation has been researched more than any other food processing techniques (Donnelly, 2004). It has come a long way since the pioneering days of early 1900's. Currently there are 34 countries that are authorized to have irradiation facilities. France and the US have the most facilities, with 8 and 20 respectively, followed by South Africa with 5 facilities, and then India, Russia, and Brazil, each with 3 facilities.

Studies reveal that benefits outweigh the risks

Major benefits of food irradiation include extending the shelf life of certain foods, decontaminating spices and other seasonings, and controlling of insect infestation in grain products, fruits, and vegetables (Hunter, 2002). Irradiation can prolong the shelf life of many fruits and vegetables by reducing spoilage bacteria and mold, and inhibiting their sprouting and maturation. Since irradiation is an effective means to decontaminate certain food products, it will help eliminate or reduce the use of toxic or environmentally harmful fumigants. Spices, herbs, and dry vegetable seasonings are the most commonly irradiated food products in the United States. Irradiation can be used as a pest control treatment on quarantined fruits and vegetables to prevent importation of harmful pests, such as the Mediterranean fruit fly. The cumulative evidence from over four decades of research, carried out in laboratories in the United States, Europe, and other countries worldwide, indicates that irradiated food is safe to eat. Statements about potential benefits from food irradiation are corroborated by scientist, doctors and many other experts in food safety and human health. Studies were also conducted to investigate the cost of food irradiation operations. The United States General Accounting Office (USGAO 2000) stated that while there have been relatively few irradiated products marketed to date, those that have been sold have been more expensive than their counterparts. According to the food irradiation industry, meat and poultry could be 3 to 8 cents more a pound, and fruits and vegetables could cost 2 to 3 cents more a pound.

Pasteurization by irradiation has been identified as a solution to enhance food safety through the reduction of potential pathogens, and it has been recommended as part of a comprehensive program to enhance food safety. According to consumer surveys (Bruhn, 2000; Troxel, 2000), irradiated food is purchased primarily for food safety benefits. These benefits are particularly important to health care and food service establishments, the primary purchasers of irradiated foods. To date, no events have been documented in the U.S. that consumption of irradiated food lead to exposure of the population at large to radioactivity (CDC, 1999).

Although no adverse evidence has been presented in prior researches, one must accept the fact that great discovery does not come without oppositions for concerns. One of the strongest opponents against food irradiation is the Public Citizen Movement (Public Citizens, 2004). A national non-profit consumer advocacy organization founded in 1971, to represent consumers' interests in the U.S. Congress. They fight for clean, safe and sustainable energy sources; for health, safety, environmental protections; and for safe and effective prescription drugs. They are not alone; they have strong fraternization and support from other advocacy groups. Among them are the Center for Food Safety, Community Food Security Coalition, Consumer Report, FoodRoutes, and Sierra Club. Reiterating the fact that no scientific evidence has been argued by those opponents, this emerging food safety technology is not advancing as it would be expected, if taking in consideration all benefits presented by over 5000 studies reviewed by The World Health Organization (GAO, 2000).

The results of previous surveys suggest that consumers are lacking sufficient and adequate information and knowledge about food irradiation. Therefore, consumers may have no opinion whether to accept this emerging food safety

technology. Once the consumers and chefs are better educated about the irradiated foods, such as through the dissemination of the results of this study, an increase in sales of irradiated foods may become possible.

METHODOLOGY

Sampling and data collection procedures

As with other computer assisted testing programs, individuals may find internet surveys less threatening, increased anonymous, and more interesting than the traditional paper-and-pencil surveys. Therefore, the internet survey was selected for data collection. The less demanding characteristics of Internet surveys facilitate greater honesty and self-disclosure (Smith & Leigh, 1997). This study used a web-based survey in determining the chefs' attitude toward food irradiation. The membership directories from professional chefs' associations were used because they would provide the best source of survey samples that represent the general US chefs' population. The members are professional chefs, with the majority being certified chefs in at least one discipline: nutrition, food safety, hazard analysis critical control point (HACCP), executive chef, executive sous chef, and certified cook. The majority of these chefs work for independent restaurants. The survey was distributed via email to about 5,000 chosen members of these associations who had email addresses. The web-based survey was created using an internet survey web site based in the UK. The survey was launched after obtaining a link and then sent to the respondents email addresses with a cover letter explaining the purpose of the study and the time it takes to complete the survey. The survey was conducted from October 10th to October 20th, 2004. There were no undeliverable emails because the addresses were tested for correct delivery by using the AOL mass-email service which filters and returns undeliverable emails before the email can be sent to the listserv. The email Blind Carbon Copy (BCC) technique was applied in order to penetrate recipients' firewalls and anti-spam programs. The survey received 1071 usable responses, a 21.4% response rate.

Questionnaire design

The questionnaire had a total of 19 questions. The questions were designed to examine the chefs' overall knowledge about irradiated foods and their concerns about present health and safety issues in foodservice operations. The 13 items for chefs' knowledge were measured using a Likert-type scale ranging 1 (I have limited knowledge) to 7 (I am very knowledgeable), while 7 items ranging from 1 (strongly disagree) to 7 (strongly agree). The remaining questions measured demographics. Demographic characteristics included education, gender, level of professional certification, area of employments, and decision making responsibilities.

RESULTS

Respondents' Demographic Profiles

The demographic profiles of the respondents consist of 72.7% of male and 27.3% female. The age of the majority of the respondents ranged from 31-40 representing 29.6% of the population, to 41-50 representing 43.3% of the population. About 76% had food safety certification; however, only 25.8% had executive chef certification. Over 54 % of the chefs who work at independent restaurants make the ultimate decision to buy food for the establishment.

Descriptive statistics

The results of the study show that chefs have limited knowledge about irradiated foods. Their answers to the questions in the construct in Table 1 are rather neutral. In Table 2 however, the results show that Chefs have great concerns about present health and safety factors in foodservice operations. These results are in line with the results of previous studies concerning consumers' attitude suggest that low level of knowledge about food irradiation maybe be a deciding factor in the future whether to buy irradiated foods and accept emerging food safety technologies and satisfy their concerns. The data in Table 1 shows that the level of knowledge about food irradiation among chefs is limited, due to lack of information and education. The means are ranked from the highest (being very knowledgeable) to the lowest (having limited knowledge). The items tested have been ranked from 1 to 13, however 2 items had the same score**. The following five items in the ascending order scored the lowest mean: how food irradiation works; regulation of food irradiation; feedback from experienced customers about irradiated foods; how safety is tested; knowledge about what chefs in other countries are reacting to the implementation of irradiated foods; and knowledge about how other countries regulate irradiated foods. These results show the criticality of very important items necessary for chefs to be educated about, regarding emerging food safety technologies.

Table 2 shows that chefs are concerned about the present health and safety measures enforced in food service operations. The results suggest that the participants' level of concerns on food safety is very high. This may be due to the fact that 76.2% of the respondents are HACCP (Hazard Analysis Critical Control Point) certified, and they understand the risk associated with lack of implementation of food safety procedures.

Table 1
Mean Scores, rank and standard deviation of survey items from Chefs' knowledge about irradiated foods

Item*	Mean	Rank	Std. Deviation
Food irradiation in general	3.08	2	1.725
Risks of food irradiation	3.02	3	1.766
Benefits of food irradiation	3.47	1	1.685
Applications of irradiation techniques in spices, fruits, vegetables, dairy, meat and fish products	2.88	5	1.938
Preparation of irradiated foods	2.80	6	1.772
Consumption of irradiated foods	2.75	7	1.595
Taste of irradiated foods	3.00	4	1.816
Feed-back from experienced customers about irradiated foods	2.27	10	1.345
Regulation of food irradiation	2.35	9	1.583
How food irradiation works	2.69	8	1.541
How safety is tested	2.20	**11	1.622
Knowledge about what chefs in other countries are reacting to the implementation of irradiated foods	2.20	**11	1.470
Knowledge about how other countries regulate irradiated foods	1.84	12	1.074

* A total of 1071 respondents were asked to rate their level of knowledge on a 7-point Likert scale ranging from 1 (I have limited knowledge) to 7 (I am very knowledgeable) for all questions.

The results also show that item "Present health and safety legislation enforcement" scored the lowest mean: 4.29. This could explain that chefs feel that food safety inspections are not a great concern. With reference to all other items the means are rather high, inferring perhaps that those are items chefs have neither total nor partial control over them as in the question of enforcement of health and safety legislation.

Table 2
Concerns about present health and safety issues in foodservice operations

Item*	Mean	Std. Deviation
Produce and fruit growing methods leave pesticide residues in foods	5.67	1.154
Bacteria - Germs found in foods	5.76	.989
Use of antibiotics and additives in aqua-cultured seafood	5.80	1.140
Danger of mercury content in specific fish such as tuna and sword fish	5.47	1.319
Danger of salmonella in shrimp	5.58	1.272
Long term effect of Genetically Modified Foods on humans	5.66	1.024
Present health and safety legislation enforcement	4.29	1.871

* A total of 1071 respondents were asked to rate their level of concerns about the present practice of food safety measures in foodservice establishment on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) for all questions.

DISCUSSION AND RECOMMENDATIONS

This study focused on chefs of independent restaurants who are empowered to purchase, store, produce and merchandise food products of their choice without the influence of a superior. The results clearly show that chefs' knowledge about food irradiation is low and concerns about food safety are high. The assessment of the level of knowledge by measuring 13 dimensions on a scale of 1 to 7, with 1 (having limited knowledge) and 7 (being very knowledgeable), show a grand mean of 2.66 and standard deviation of 1.61 for overall responses.

Therefore, the chefs clearly answered that they have little or no knowledge about irradiated foods. Although a number of studies had been conducted with consumers and retail outlets previously, no such study was conducted with

chefs. Consumers' studies also revealed that negative information dominates positive information as it appears that the ones against food irradiation outweigh those who are for irradiated foods. These results may be explained by the fact that 76.2% of the respondents were certified in food safety and sanitation HACCP (Hazard Analysis Critical Control Point). Consequently, they are aware of existing danger in food processing. These findings support the need for education and dissemination of information to improve the present level of knowledge among chefs. These findings also support the results of a National Cattlemen's Beef Association study (www.mnbeef.org/Irradiation/ncba_study.htm), indicating that consumers know little about food irradiation. The authors suggest that further studies need to be conducted investigating a larger population and should include the questions about chefs, attitude, acceptance of emerging food safety technologies, and intention to purchase irradiated foods. Hypothesis should be formulated to generate supporting evidence to generalize the findings. Eventually, additional studies can then be replicated with restaurant customers to determine whether there are differences between these two groups toward food irradiation. A conceptual model, using structural equation modeling, could be developed to analyze whether specific factors influence chefs' and customers' attitude with regards to their intention to buy irradiated foods, their acceptance of emerging food safety technologies, and whether the said factors will have an effect on the overall restaurant performance.

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CUSTOMER PARTICIPATION: AN INTEGRATED TYPOLOGY OF CUSTOMER ROLES

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ABSTRACT

This paper presents a typology of four key customer roles in the customer to service-firm relationship: The Investor, The Engineer, The Broker, and The Auditor. The current work expands on previous studies of customer participation and customer relationship by coordinating research outcomes from marketing, organizational behavior/human resources, and operations management and integrating key customer roles into one framework. Research and managerial implications for service industry research are provided, stressing the ability of a service firm to discriminate among customer roles in defining relevant customer participation and identifying training and organizational issues related to customer participation.

Key Words: customer participation, human capital, relationship marketing

INTRODUCTION

The current work expands on previous studies of customer participation and customer relationship by coordinating research outcomes from multiple fields and integrating key customer roles into one framework. Four key customer roles have been identified by means of a comprehensive literature review of the fields of marketing, organizational behavior/human resources, and operations management: The Investor, The Engineer, The Broker, and The Auditor. Specific manifestations of these four roles in the aforementioned literatures are examined in turn. As noted, the discussion of customer participation is presented at a conceptual level and defined as customer enactment of any of the roles identified in this paper. The current examination of the topic does not preclude the need for future research on each of the customer roles and the personal or situational constraints that may facilitate or impede customer enactment of these roles. Nonetheless, the objective of this paper is to foster an integrated discussion of customer participation that permits researchers and service managers to maintain a balanced perspective on how customers may be employed as a useful resource for the firm.

The Importance of Customer Participation for the Service Firm

Two major trends in strategic business management and marketing reinforce our belief that customers are already viewed as a capital resource for the service firm: (1) the proliferation of customer relationship management (CRM) technologies and (2) the emergence of a field known as knowledge management. Investment in customer relationship management (CRM) technology largely assists firms to personalize product offerings and services to customers in response to data collected on customer preferences and habits (Sullivan, 2001). Due to current technological capacity for retaining vast data stores of customer information, firms are now promoting customer retention for the long-term, looking to personalize and extend the relationship with the customer as much as possible, when the customer is assessed to be a *profitable* transaction partner (Grossman, 1998). Since the costs of managing the relationship vary according to customer profiles and competencies, knowing the level of profitability from customers must be part of the decision to retain customers (Gronroos, 1994; Kaplan & Narayanan, 2001). Expanding this notion of “profitable”, we submit that the service firm has a vested interest not only in promoting customer actions that increase revenues, but in promoting customer actions that result in greater efficiency and reduced transaction costs.

However, one of the more challenging problems is that many customer relationship management systems are not balanced in capturing information about the full spectrum of activities customers carry out in their transactions with the firm. Knowledge management research suggests that customer intelligence must be tapped to achieve relevant organizational learning (Huber 1991; Crossan, Lane & White 1997) and customer skill viewed as core rather than peripheral assets (Barney, 1991). With this in mind we now turn to service blueprint trends exploiting customer work.

Service Blueprints and Customer Work

It is in the service firm that we see the most evidence of service blueprints merging line personnel and clients in impromptu teams that coordinate tasks and exchange information in the improvisation of solutions to client needs. Service firms deal with individual client requirements as well as mandatory client presence at the time of service production. More recently, researchers (Hsieh, A., Yen, C. & Chin, K., 2004; Xue, M. & Harker, P.T., 2002) have examined how customer participation in organizational work impacts firm productivity and profitability and how uncertainty and operational costs may be reduced by appropriate task assignment and supervision of customer roles in the organization. The abilities of

employees and customers to work as a team to negotiate win-win outcomes and perform expected tasks (Mills, Chase & Margulies, 1983) have taken precedence as factors in the success of the service delivery system.

In recent decades, service company strategies in human resources, e.g., corporate downsizing and outsourcing of personnel, and augmentation of self-service options, e.g., Internet websites, have contributed to the pressing need to view customers as a complement and, at times, an alternative to employee labor (Eiglier & Langeard, 1977; Fitzsimmons, 1985; Kelley, Donnelly & Skinner, 1990; Lovelock and Young, 1979). A prime example of this is the self-service system. Managers as well are increasingly called upon to decide which resources and tools should be transferred to the customers for self-service (Bateson, 1985), raising the need for firms to examine the potential wear and tear on these resources accessed by customers, and the need for customer training. We would argue that the consideration of customers as alternatives to traditional employee-based human capital (Lepak and Snell, 1999) is a rational extension of the organizational and human resources trends over the past half-century treating organizational labor as increasingly impermanent and external, as exemplified by proliferating outsourced labor contracts. Drucker (2002) perceives a real need for organizations to “take management responsibility for all the people whose productivity and performance it relies on — whether they're temps, part-timers, employees of the organization itself, or employees of its outsourcers, suppliers, and distributors” (p. 75). With this in mind, we turn now to the various roles via which customer participation in organizational work may manifest itself.

Defining Customer Roles and Customer Participation

Based on a review of pertinent literatures we identify in Table 1 a set of core customer roles that define customer participation in the work of a service firm: termed generally as The Investor, The Engineer, The Broker, and The Auditor. A description of how each role manifests itself in the various literatures follows. The enactment and mastery of these roles by customers are postulated to produce customer capital in the same way that employee labor translates into human capital for the firm.

Table 1
Classification of Customer Roles in Firm-Customer Relationships

Primary Role Name	Consumer Behavior and Marketing Manifestation	Organizational and Management Theory Manifestation	Operations Management Manifestation
Investor	Buyer	Exchange Partner	End User
Engineer	Co-designer	Influencer	Co-producer
Broker	Promoter	Coordinator	Co-consumer
Auditor	Evaluator	Validator	Inspector

Manifestations of The Investor

The Buyer is the heart of the study of consumer behavior. A buyer examines, purchases, and uses products and services—buyers invest time and money in the acquisition of a firm’s offerings. In the management literature we find the manifestation of the customer as *The Exchange Partner* who invests resources and personal trust in relationships with the firm. Customers and firms may be motivated to form higher order coalitions with each other that can provide them with the requisite resources for sustainability (Oliver, 1990; Pfeffer and Salancik, 1978). For example, as investment partners, customers invest capital in companies through the purchase of their stock or equivalent financial vehicles. Lastly, operations management offers us *The End User* who contributes time, attention, energy and skill in the deployment of company products and services for his/her personal problem solving. This role is significant across all types of products and services, and very important to the post-purchase or post-delivery stages of product and service support, e.g., as indicated by customer willingness to use buyer guides, information manuals or internet support links.

Manifestations of The Engineer

The Co-designer is another widely accepted role for customers (Kaulio, 1998) who are often asked by market researchers to estimate their personal utility for new product/service attributes. Customers may express desire for services that are not yet offered, or are presently offered by a competitor, or may practice design engineering when they let firms know when transfer of products into a new cultural setting may not work. The issue of whether “end user” customers are equal or better than “expert designers” is an issue worth investigating in the service context. Organizational theory suggests the additional manifestation of *The Influencer*; this customer is involved in social engineering and impacts organizational design at various levels, e.g., lobbying for codes and regulations and exhibiting pressure through various interest groups. Organizational structures can be indirectly engineered by customers, seen in the many boundary spanner

subunits (Aldrich & Herker, 1977) such as sales and marketing, customer relations, and legal counsel which have been institutionalized over time in many business firms to handle customer concerns speedily and accurately (Albrecht & Zemke, 1985; Peters, 1982). Finally, the customer as construction engineer is apparent in *The Co-producer*, seen when, during the service process, customers explain to employees the special needs aspects of their requests and fulfill their own tasks to customize service offerings, since many times the service outcomes hinge on the customers' doing their own parts well.

Manifestations of The Broker

In marketing, *The Promoter* is a word of mouth communicator, who, according to Arndt (1967), is a key tool in the growth of a customer base. Customers' experience and familiarity with a product permits them to share this prior knowledge with other potential consumers (Alba & Hutchinson, 1987). Company websites are posting testimonials and quotes from their customers, and customers are offering encouragement on their own homepages. In creative broker fashion, consumers even purchase goods and services on behalf of others, seeking to bring them into the fold of avid users of a product or service. Next, organizational theory notes that customers can act as *The Coordinator* in two significant ways. First, they may require as part of their contractual stipulations that the service firm form an alliance with selected external organizations. For example, a buyer may require that a real estate agent cooperate with the buyer's preferred attorney or lender. Secondly, customers may also serve as message brokers to facilitate the transfer of information (or materials) from one service unit or worker to another in the service firm. Hotel guests checking out may identify to the front desk personnel any late charges that may be pending from room service, breakfast, or phone services. Lastly, customers co-exist with other customers, enacting the role of *The Co-consumer*. This has proven to be a boon in situations where multiple customer goals and perceived outcomes are well matched, e.g., a comedy club where one customer's response can bring forth positive vibes in others. However, there are many occasions where customer behavior has an unwanted impact on other customers. Mixing smokers and non-smokers or families with children and no-kids couples are traditional trouble spots for restaurant visits. How customers are socialized to conduct themselves around other customers is a complex issue for which study is overdue (Jones, 1995). Social presence of others can even constrain or embarrass a buyer, e.g., when engaged in a purchase or situation that is viewed as having negative social overtones (Dahl, Manchanda & Argo, 2001).

Manifestations of The Auditor

Many customers play a critical role in the valuation of firms by providing feedback and ratings of quality that drive share value. As part of the client-firm feedback loop, customers acting as *The Evaluator* have been continuously involved in the rating and evaluation of services and products they have experienced. *The Validator* endorses a firm's strategic business investments by agreeing to use new service methods or technologies and upholds practices related to the firm's broader social agenda by joining in a firm's environmental or safety programs, e.g., conserving water or energy during hotel stays. As *The Inspector*, customers play a role in assuring the integrity and consistency of their own service experience by performing formative spot checks at will. An example of formal inclusion of this role in the service blueprint is when a restaurant guest may be asked to sample the wine during service but prior to its being shared with other guests.

Using Knowledge about Customer Participation

Before a service firm can rely on customer participation in these roles to serve as human capital for the firm, there are some preliminary questions that must be answered. These questions revolve around (1) how each role contributes (or not) to the firm's mission, (2) the customer's competency in enacting each of the described roles, and (3) the customer's motivation for enacting each of the described roles. In other words, in order to reap benefits from applying knowledge of the various roles customers may undertake, it is necessary for firms to do some preliminary investigation regarding other factors in the service firm-client relationship. Additionally, in attempting to benefit from customer participation in a service firm, one often faces situations and settings that make it difficult for customer participation to occur satisfactorily. These circumstances may involve the employees or other actors present, the state of equipment or technology, time available, or other situational constraints on the customer doing his/her part.

Estimating the Utility of Customer Participation

The first step for a service firm is to identify which of the customer roles enumerated in this paper have utility for the firm's organizational mission and service blueprint and whether or not increasing customer task fulfillment or competency in these roles is a potential factor in decreasing operational costs or increasing customer satisfaction and perceived market value of the service or of the firm. It is understood that customers cannot be socialized or trained in the same manner as traditional employees, but identifying opportunities to ask customers to engage in necessary task activities is a logical progression from the creation of this role inventory. Although customers may be targeted for training (Noel, Ulrich, & Mercer, 1990), they are not normally subject to the performance appraisals of service firm supervisors (Larsson & Bowen, 1989; Kelley, Skinner & Donnelly, 1992). Sanctions will be more difficult to apply since few data are presently collected by firms on customers' activities in the various roles described in this paper. Thus, managers must decide which critical customer tasks must be monitored or evaluated and which left unobserved—will one sample customer activity in a

manner similar to the appraisal of employee performance? In essence, the appropriate level of supervision over customer work must be determined from a cost/return perspective.

Furthermore, difficulties in monitoring customer performance as a discrete measure from employee performance may arise that are comparable to the problems of assessing team member performance in group work. Team measurement difficulties are compounded by the use of customers as evaluators of service quality through customer feedback systems. It is also likely that, as obligatory customer participation increases in the service blueprint, customers will attribute negative outcomes to the employee, while attributing positive outcomes either equally to server and customer or solely to their own efforts (Weiner, 2000). In any case, once customer roles have been identified as useful for the service firm, the question of developing customer competency must be visited.

Leveraging Customer Competencies in their Defined Roles

If and when customers are to be included in the skill set of an organization, critical steps must be taken to assess and enhance customer competencies in relation to the tasks they are expected to perform (Canziani, 1997). It is intriguing to note that the various business disciplines have recognized roles that bear resemblance to each other in terms of the skills required for the embedded tasks. What often varies across each row of Table 1, however, is the structural level or unit with which customers interact as they fulfill the role. If we examine the first general role of The Investor, in the deployment of each of its manifestations (*buyer/exchange partner/end user*) we find a need for customer attention skills in the identification, comparison, and deployment of technical features of products and services in order for customers to comprehend the inherent utility of their coalition with the service firm or with its products and services. Speed and ease of learning about new products or systems, ability to visualize and obtain benefits from products or services, and desire to repeat process or product usage again are all factors. The development of text-based materials and content-heavy support information may be a critical success factor in preparing customers to be effective in these roles. Media delivery modes for multiple learning styles may comprise face-to-face encounters, telephone, websites, or written documents.

The next row related to The Engineer (*co-designer/influencer/co-producer*) calls for customer competency in negotiating win/win outcomes and willingness to accept trade-offs. Skills such as communicating detailed instructions, personal information and self-interest in a socially appropriate manner are also critical. Group, e.g., forums and focus groups, and personal interaction will be emphasized as modes for conducting these types of customer activity. Following this thread of competency needs analysis, we note that the competencies useful to the three activities of *promoter/coordinator/co-consumer* related to the role of The Broker are those of educating and coordinating others as well as translating interests as middleperson or matchmaker in social networks. Lastly, the various manifestations of The Auditor role (*evaluator/validator/inspector*) essentially require similar cognitive observation, retention and judgment skills but expect customers to offer feedback at different stages of the relationship: during use, post-use, and even previous or subsequent to the relationship lifespan. At this point, we turn to specific customer-service firm relationship variables that may influence the customer's levels of participation in the roles that have been identified in the previous section.

Variables impacting the customer's decision to participate

As a construct, motivation to participate is relatively unwieldy; it can in turn refer to a customer's internal or psychological frame of mind or to an external reward or sanction system. We do not in this section attempt more than a look at a set of four understudied factors that relate to aspects of the service firm-client relationship and may influence customer behaviors. These comprise the *level of relationship*, *degree of perceived customer obligation*, *the attachment of the customer to the firm*, and *the expected duration of a transaction*. Understandably, these factors are viewed primarily as moderating control variables, rather than specific variables of a motivational strategy that the service firm might apply to encourage customer participation.

A series of propositions are offered to further isolate the impacts that these variables would conceivably have on customer's choice to fulfill the various roles presented in this paper. With respect to the *level of relationship*, essentially, customers can recognize relationships with service firms at multiple levels of analysis. A customer may choose to identify him/herself with (a) with the general industry or field of interest, e.g., being a retail customer (b) with a firm and its sub-units or departments, e.g., being a Buy-mart customer, or (c) with employees or agents of the firm, e.g., being a Buy-mart customer interacting with a specific Buy-mart employee. Customers perceive linkages with individual boundary spanners to be stronger and more critical than an abstract relationship with a faceless company (Albrecht, & Zemke, 1985; Zeithaml, Parasuraman & Berry, 1990; Berry, 1995). Customer rationalization for staying in relationships with firms can derive from non-economic benefits such as genuine liking of personnel, facilities, or even other customers (Benepudi & Berry, 1997). In this vein, we believe that customers who build stronger, personalized linkages with individual members of service firms will seek more active role participation in order to further the association or feeling of server/customer team membership.

P1: As the relationship moves from general identification with the industry to specific identification with the firm and subsequently with the employees or agents of the firm, customer participation will increase.

Additionally, Feld (1997) found that contact with multiple persons in a network is associated with persistence of social ties over time. Lovett & Harrison (1997) suggest that client trust in the organization has a positive correlation with the number of connections to the firm. Determining the benefits versus costs of a client interacting with more than one service agent in an organization is a key managerial activity. This is supported by evidence that “employee quit rates partially mediate the relationship between high-involvement [human resources] practices and sales growth (Batt, 2002, p. 587). Methods to offset the customer satisfaction consequences of a key contact employee leaving the firm include: “staff rotation, employee service teams, informal networking with multiple employees, and one-stop shopping” (Bendapudi and Leone, 2001, p. 108).

P2: As the number of service firm employees with whom customers identify discrete relationships increases, customer participation will increase.

As far as the *degree of perceived obligation*, customers may transact with a service firm on the basis of transience (no commitment—filling a gas tank on a road trip), implicit or social obligation (using the same accountant at tax time) or explicit contractual obligation (signing an apartment lease). There is interaction between the level of the relationship and degree of perceived obligation in that the feeling of social obligation or bonding is enhanced by interactions between the employees of the firm and customers (Wilson, 1995). Firms may also use marketing tactics to promote an implicit obligation or actual membership (Lovelock, 1983) with the firm. Such tactics can include bonus cards or points for increased purchases, perquisites or corporate-labeled giveaways for good customers, or regular mailings or other communications implying that the customer is one of the “family”. Wulf, Odekerken-Schroder & Iacobucci (2002) have determined that investment in activities that promote the perception of consumer/firm relationships can add to customers’ perceptions of value and increase their demonstration of loyalty behaviors.

P3: As the degree of perceived obligation increases from transient to implicit to contractual, customer participation will increase.

However, firms need to be cautious in their deployment of tactics to increase the perception of obligation to the firm. Obligation in the face of boredom or customer dissatisfaction can lead to organizational costs in terms of the customer’s decreased attachment, negative appraisal and word-of-mouth, and other unproductive behaviors.

P4: As customer satisfaction decreases, customers at higher levels of perceived obligation will evidence decreased participation.

The third variable, *attachment*, refers to the positive liking and commitment expressed by the customer about the firm, demonstrated both verbally and through repeat purchases, conceivably across product lines. This includes the notions of affiliation, attachment and loyalty (Bendapudi & Berry, 1997; Gronroos, 1994; Grossman, 1998) coinciding with the customer’s temporal history as a member or affiliate of the firm and resistance to switching behavior.

P5: As customer attachment to the service firm increases, customer participation will increase.

In continuation, the *expected duration of a service* is normally predictable and largely dictated by the nature of the service itself; it is based on Hume’s (2000) three types of services: episodic, extended, and continuous, furthering Lovelock’s earlier definitions of discrete versus continuous transactions (1983). Continuous services are essentially delivery systems that extend over time without noticeable cessation of service, e.g., signing up for a bank account or natural gas contract that promises rendering of service over an extended period of time and is billed to the customer on a periodic basis. Extended services are longer (often contracted) transactions, e.g. enrolling in college. Switching costs are higher for customers within relationships with firms who deal in continuous and extended services. In contrast, firms whose services are finite, e.g., restaurants, have to work harder to retain customers, since there is a clearly identifiable ending to each transaction at which point clients may reconsider their affiliation with the firm and seek alternative sources of service.

P6: As the expected duration of a service moves from finite to continuous, customer participation will increase.

We note that anomalies in actual duration compared to expected duration can be positive or negative for either the customer or the firm. For example, health club customers that renew contracts year after year may be positive influences on the organization, incurring lower costs and exhibiting higher satisfaction with services due to increased familiarity with

club operations and facilities. Conversely, students who take longer to graduate from a high school or college due to system or personal constraints may exhibit dissatisfaction or disruptive behaviors. Retention strategies are most appropriately applied when the actual transaction duration is shorter than the expected duration, and extending it would bring increased marginal utility to both transaction partners.

P7: Customers who perceive that actual duration exceeds expected duration of a service will participate less than customers who do not perceive that actual duration exceeds expected duration of a service.

CONCLUSION

To summarize, a typology of customer roles is offered that represents the multiple ways the business literature suggests customers can participate in a relationship with the service firm. Customer participation has been shown to extend beyond the marketing domain; it has been suggested that the role inventory presented can assist managers in identifying customer influences on both sales opportunity and production cost elements when designing service delivery systems by helping them understand how customers interact with all parts of the organization. Other strategic uses of the framework include helping the service firm acknowledge its own role in the development of customer competency and avoid single-minded focus on employee-based training strategies. The ability to discriminate among customer roles and associated competencies may stimulate managerial action to develop customers as significant resources for the service firm.

Future research endeavors may seek to answer the following questions: What are the customer role sets and required competencies that define customer participation in specific industries? What types of customer/server task interdependence are found in each of the various roles? In *what contexts* and *how* do organizations orient and develop customers to perform (or not perform) each of their determined roles? How do alternative blueprints for customer participation and strategies shifting role responsibilities from the server to the customer impact productivity of the firm or satisfaction of the customer?

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A STUDY OF ETHNIC DIFFERENCES IN THE IMPORTANCE AND PERFORMANCE OF URBAN DESTINATION
ATTRIBUTES: THE CASE OF NEW ORLEANS

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ABSTRACT

This study explores the differences in importance of and satisfaction with destination attributes between African-American and white travelers to an urban tourism destination, namely New Orleans. Results showed that although there were significant differences in ratings of importance and satisfaction with two destination attributes between African-American and white travelers visiting New Orleans, these attributes were not highly rated in terms of importance. In addition, analysis of gaps between importance and performance of destination attributes showed remarkable similarity between the two groups.

Key Words: urban tourism, ethnic travel, African American, destination attributes

INTRODUCTION

As the tourism industry in the United States becomes increasingly competitive, tourism marketers are using market segmentation and target marketing to increase the effectiveness of their marketing efforts. Although segmentation by demographics is a traditional method, segmenting by ethnicity has only recently grown in importance. The Travel Industry of America's (TIA, 2003a) Minority Traveler Report highlighted the similarities and differences between travel habits of U.S. minority groups such as African Americans, Asian Americans, and Hispanics. The TIA (2003a) study stated: "The percentage of the U.S. population belonging to minority groups has climbed dramatically in the last few decades. The spending power of these growing consumer segments challenges the U.S. travel industry to better understand and better serve these markets....By becoming aware of the differing patterns of travel behavior of these minority groups, travel marketers will be better informed to meet their travel needs...p.1" This study focuses on one minority group, African Americans, and compares them with white travelers with regard to their ratings of the importance of and satisfaction with the attributes of an urban tourism destination, namely New Orleans.

Purpose

There are two major parts to this study. In the first part, the gaps between importance and satisfaction with New Orleans' attributes for each group will be examined and compared using Importance- Performance analysis. In the second part, the differences between African Americans and whites in terms of their ratings of the importance of general attributes of any tourism destination will be examined. Next, the differences between African Americans and whites with regard to their satisfaction ratings of destination attributes, specifically of New Orleans, will be discussed.

METHODS

Visitor profile data that were collected on behalf of the New Orleans Convention and Visitors Bureau and the New Orleans Marketing Corporation were utilized for this study. Visitors were screened to ensure that only those who reside outside of the New Orleans area were included. A second screening question was also asked to determine if the visitor had plans to leave the New Orleans area within 24 hours. Only those visitors who did have plans to leave within 24 hours were surveyed. The reason for the screening question was that several of the survey questions refer to opinions or activities that the typical visitor might not be able to provide answers for (such as trip satisfaction) if intercepted at the beginning of the visit. The survey instrument included demographic, stay-specific, activity related, trip planning, spending, importance of destination attributes, and satisfaction with New Orleans related questions. This study will use the sections of the survey instrument that consisted of questions regarding importance of destination attributes and satisfaction of visitors with their trips to New Orleans. In these sections, respondents were asked to rate the importance of destination attributes on a five point Likert scale (1=Not at all important; 5=Very Important) and also to rate their satisfaction with these attributes specifically for their visit to New Orleans using a similar scale (1=Not at all satisfied; 5=Very satisfied).

Visitor intercept surveys were conducted with 718 U.S. resident visitors between June 2003 and September 2004 at various locations in New Orleans that were most likely to be frequented by visitors. This sample included 131 African American travelers and for analysis in this study a random sample of 131 white travelers was drawn from the remainder of respondents. After the participants were randomly selected, they were compared to the total sample to check the representativeness of the sub sample.

Differences between African American and white travelers in terms of importance and satisfaction ratings of destination attributes were tested using T-tests. In addition, Importance Performance Analysis (IPA) was used to examine the differences between importance and satisfaction with destination attributes within each ethnic group. Martilla and James (1977) are credited with the development of the IPA technique which has been in tourism and hospitality by Evans and Chon, 1990; Martin, 1995; Hudson and Shepard, 1998; and Hudson, Hudson, and Miller (2004). IPA is used to examine the gaps between ratings of importance and satisfaction and the magnitude of these differences (gaps) can be used as a measure of how close the attribute came to meeting or exceeding visitors' expectations (Burns, Graefe, & Absher, 2003).

RESULTS

Table 1 shows the results of the means for the ratings of the importance of destination attributes for African American visitors to New Orleans. The top five important attributes for African Americans were "friendly people," "cleanliness," "safety," "adult destination," and "affordable." The bottom two were "sport and recreation," and "family atmosphere." In terms of satisfaction with New Orleans, African Americans ranked "friendly people," "adult destination," "exciting," "entertainment," and "unique" at the top. At the lower end were "cleanliness," and "family atmosphere." It must be noted that African Americans were highly satisfied on two of the five most important destination attributes.

Table 1
Mean ratings of importance and satisfaction rating of destination attributes for African American visitors

Attribute	Mean of Importance	Mean of Satisfaction	Gap
Friendly People	4.88	4.98	+.10
Cleanliness	4.78	4.09	-.69
Safety	4.69	4.47	-.22
Adult Destination	4.68	4.98	+.30
Affordable	4.67	4.40	-.27
Exciting	4.60	4.97	+.37
Popular	4.34	4.82	+.48
Entertainment	4.32	4.96	+.64
African American Values	4.23	4.69	+.46
Unique	4.14	4.91	+.77
Sport & Recreation	3.62	4.33	+.71
Family Atmosphere	3.34	4.25	+.91

Scale: 5=Very important; 1=Not at all important; 5=Very satisfied; 1=Not at all satisfied

Table 2
Mean ratings of importance and satisfaction rating of destination attributes for white visitors

Attribute	Mean of Importance	Mean of Performance	Gap
Friendly People	4.92	4.99	+.07
Adult Destination	4.72	4.95	+.23
Cleanliness	4.70	4.05	-.65
Safety	4.66	4.52	-.14
Affordable	4.64	4.46	-.18
Exciting	4.47	4.94	+.47
Entertainment	4.27	4.98	+.71
Unique	4.22	4.88	+.66
Popular	4.16	4.80	+.64
Family Atmosphere	3.20	4.08	+.88
Sport & Recreation	3.15	4.60	+.45
African American Values	2.37	4.09	+.72

Scale: 5=Very important; 1=Not at all important; 5=Very satisfied; 1=Not at all satisfied

Also in Table 1 are the gaps between importance and satisfaction for African Americans. Negative gaps are seen in “cleanliness,” “affordable” and “safety,” while the largest positive gaps are seen “family atmosphere,” “unique,” “sport and recreation,” and “entertainment.” Again, note that the attributes with negative gaps were also ranked among the most important for African Americans.

The results for white travelers are shown in Table 2. The top five important attributes for whites were “friendly people,” “adult destination,” “cleanliness,” “safety,” and “affordable.” The bottom two were “sport and recreation,” and “African American values.” In terms of satisfaction with New Orleans, whites highly ranked “friendly people,” “entertainment,” “adult destination,” “exciting,” “entertainment,” and “unique.” Again, similar to African Americans, whites were highly satisfied on two of the five most important destination attributes. At the lower end were “cleanliness,” and “family atmosphere” also ranked similarly by African Americans.

Table 2 also shows the gaps between importance and satisfaction for whites. Negative gaps are seen in “cleanliness,” “affordable” and “safety,” all three attributes rated among the top in importance. The largest positive gaps are seen in “African American values,” “sport and recreation,” and “family atmosphere.”

Table 3 shows the means and standard deviations of the importance ratings for African Americans and whites. Also included are the *p* values of the T-tests conducted to test the differences between the means of the two groups. Results show that only two of the 12 attributes were significantly different in importance between the groups. These were “African American values,” and “sport and recreation.”

Table 3
Means, standard deviations, and T-test results of importance ratings

Attribute	Means Whites	Standard Deviation	Means A.Americans	Standard Deviation	<i>p</i> values of T-test
Exciting	4.47	.586	4.60	.565	.087
Adult Destination	4.72	.516	4.68	.598	.581
Popular	4.16	.742	4.34	.730	.055
Unique	4.22	.530	4.14	.551	.210
Family Atmosphere	3.20	.948	3.34	.800	.206
Entertainment	4.27	.552	4.32	.572	.442
African American Values	2.37	.768	4.23	.697	.000
Affordable	4.64	.542	4.67	.503	.637
Sport & Recreation	3.15	.789	3.62	.741	.000
Safety	4.66	.474	4.69	.465	.694
Cleanliness	4.70	.477	4.78	.413	.127
Friendly People	4.92	.278	4.88	.329	.311

Scale 5=Very important and 1=Not at all important

In both cases, African Americans rated them as significantly higher in importance than whites. The same two attributes were also significantly different in the satisfaction ratings of New Orleans for the two groups (Table 4).

However, African Americans were more satisfied than whites in “African American values” but less satisfied than whites in “sport and recreation.”

DISCUSSION

The results of this study show striking similarities in the importance rankings of destination attributes between African Americans and whites. The top five ranked attributes were the same for both groups although the rank order shows a slight variation. Both groups ranked “friendly people” as the most important attribute of any city destination that they would consider visiting. For African Americans, this result was similar to the findings of Phillip (1994) that indicated that African Americans were looking for security, comfort, and social acceptance. The importance of this attribute is an advantage for New Orleans since research has shown that the city is consistently rated very highly for the friendliness of its service people (New Orleans Visitor Profile, 2003).

Thus, it was not surprising to find that this attribute was also ranked the highest in terms of satisfaction with New Orleans for both groups. A very different result was seen in studies of Korean outbound travelers by Chen and Hsu (2000) where “friendly local people” was ranked only tenth in importance for a destination. For the attributes ranked second through fifth, African Americans differed from whites in their higher importance rankings of “cleanliness” and “safety” over “adult destination.” In terms of satisfaction, after the top rated attribute, there were similarities between the groups in their satisfaction ratings. The same attributes rounded out the top five (although in slightly different rank order), “adult destination,” “exciting,” “entertainment,” and “unique.” An examination of the lower ranked importance attributes also shows similarities. “Sport and recreation” and “family atmosphere” were among the lowest attributes for both groups. The latter attributes ratings are consistent with the New Orleans Visitor Profile (2003) that showed that majority of visitors to New Orleans were adults unaccompanied by children. It is also logical that visitors to an urban destination do not place a high importance in the availability of sport and recreation. The major difference in importance rankings at the lower level, and one that can be expected was that “African American values” was ranked as the least important attribute for whites. With regard to satisfaction ratings, the least ranked attributes also showed similarities. If “African American values” was excluded the lowest ranked satisfaction attributes were the same for African Americans and whites. Both groups included “cleanliness,” family atmosphere,” “safety,” and “affordable” among the attributes shown the least satisfaction. Consistent with the IPA technique, the gaps between importance and satisfaction for each attribute can be examined for positive and negative differences. Striking similarities are seen in the attributes with negative gaps between importance and satisfaction. Both ethnic groups showed negative differences in “cleanliness,” “affordable,” and “safety.” These attributes would fall into the category of functional destination attributes as posited by Sirgy and Su (2000). Unfortunately, for New Orleans, these attributes were also ranked among the most important by urban destination visitors.

Table 4
Means, standard deviations, and T-test results of satisfaction ratings

Factor	Means Whites	Standard Deviation	Means A.Americans	Standard Deviation	p values of T-Test
Exciting	4.94	.240	4.97	.173	.239
Adult Destination	4.95	.210	4.98	.150	.311
Popular	4.80	.419	4.82	.388	.760
Unique	4.88	.329	4.91	.290	.426
Family Atmosphere	4.08	.668	4.25	.637	.038
Entertainment	4.98	.150	4.96	.192	.475
African American Values	4.09	.488	4.69	.510	.000
Affordable	4.46	.500	4.40	.491	.320
Sport & Recreation	4.60	.507	4.33	.487	.000
Safety	4.52	.501	4.47	.545	.443
Cleanliness	4.05	.369	4.09	.455	.372
Friendly People	4.99	.088	4.98	.123	.568

Scale 5=Very satisfied; 1=Not at all satisfied

In an IPA matrix, where there are four quadrants; high importance and low performance; high importance and high performance; low importance and low performance; low importance and high performance (Martilla and James, 1977) these attributes would fall into the most crucial quadrant – high importance and low performance. Clearly, city officials must address the cleanliness and safety issues and tourism and hospitality service providers must become aware of the negative gap in the affordability ratings of New Orleans. In the quadrant of high importance and high performance, the “keep up the good work” IPA quadrant, there are two attributes; “friendly people” and “adult destination.” Tourism marketers for the city would be well advised to use these attributes to their advantage. Results of T-tests of differences between the mean ratings of African Americans and whites in both importance and satisfaction were significant for only two attributes. As expected, importance and satisfaction ratings for “African American values” were significantly higher for African Americans than whites. Despite this difference, this finding may not be that important since this attributes is not highly ranked in importance even for African American visitors in an urban context. For “sport and recreation,” the differences in importance were significantly higher for African Americans but white visitors were significantly more satisfied. Again, this attribute was among the lower ranked in terms of importance.

CONCLUSIONS

Given, these findings it seems that there are very few substantive differences between African American and white visitors to New Orleans both in terms of importance and satisfaction with urban destination attributes. This is different

from the findings of outdoor recreation, park, open space landscape, natural settings research (Kaplan & Talbot, 1988; Dwyer, 1993, Gobster, 1998) but similar to the findings of Phillip's (1993) destination preference research. One of the possible conclusions of this study is that while prior research shows that there may be differences between ethnic groups in outdoor recreation activities there are very few differences among urban visitors of different ethnic groups, especially between African American and white travelers. Since a substantial proportion of minorities reside in U.S. cities, they are probably more comfortable in visiting urban destinations as tourists and this research study will be important to tourism marketers if similar results are found in other urban destinations. This will be a good direction for future research. In addition, other minority travelers such as Asian Americans and Hispanics should be included in urban destination studies. As for the city of New Orleans, the negative gaps in functional destination attributes such as cleanliness, safety, and affordability results in a reduction in functional congruity which, according to Sirgy and Su (2000), has an effect on travel behavior to a destination.

Limitations

Ethnicity in the tourism and leisure context is complicated and complex with many conceptual pitfalls (Floyd, 1998; Sasidharan, 2002) and a limitation of the ethnicity theory is that diversity within ethnic groups is not fully recognized (Floyd, 1999). Hutchison (1998) suggested it was difficult to identify a distinctive "African American ethnicity" in the same way as other ethnic groups, and it is often assumed that most Americans of African origin share the same ethnicity and culture. In addition, this study examined the results from surveys at only one urban destination and it is possible that urban visitors to New Orleans may not represent the population of urban tourists in the United States

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TOURIST SHOPPING BEHAVIORS, MOTIVATIONS, EXPERIENCES, AND ENVIRONMENT

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ABSTRACT

According to the Travel Industry Association of America (TIA), more than 60% of tourists in 2004 included shopping during their trips, and the average expenditure was above three hundred and fifty US dollars. This study is an attempt to investigate (1) consumer purchasing behaviors, and (2) tourist shopping preferences. A sample of over 700 respondents participated in this study. Survey participants were asked to evaluate what store attributes they desire and what sources of information they used while selecting a store to shop in during their trips. Results indicate that male and female consumers exhibit clear preferences toward their ideal shopping environment.

Keywords: Shopping behaviors, Shopping environment, Tourist

INTRODUCTION

People now look at products as means of adding more meaning to their lives (Moynagh & Worsley, 2002). Two different cultures could have entirely different shopping characteristics for the same income level (Mooija & Hofstede, 2002). Ackerman and Tellis (2001) noted that there are a lot of similarities in the shopping behaviors of the people in a particular community and their cultural values play a major role in deciding the way those people consume. The retailers are increasingly finding that the shopping habits are often not planned (Tauber, 1972). As the consumer behaviors get more unpredictable and with an increase in competition it is very important for the retailers to develop the right strategies (Leszczyc, Sinha, & Timmermans, 2000). Foxall (1993) suggested that there are three consequences of consumer behaviors including hedonic, informational, and aversive shopping behaviors. The hedonic group derives pleasure by owning or consuming goods whereas the shoppers under the informational category shop to make their social status obvious.

Consumer Demographics

Male consumers. Roy, Pedersen, & Hikmet (1995) suggested that shopping is largely a female activity, particularly for grocery shopping. The authors reported that only 15% of the men surveyed believed that shopping groceries was their primary responsibility. However, in the case of male clothing, 56% of the respondents claimed to be primary shoppers. The level of enjoyment was found to be the highest among the male shoppers who considered shopping as a joint activity. Otnesa and McGrath (2001) have made an attempt to develop a taxonomy for male shopping behavior. According to the authors, the male shopping behavior can be generally classified into three categories as:

- Grab n Go Shopping: This stereotype was found in both men and women. These shoppers just get what they want and leave as soon as possible.
- Whine and/or wait: No noticeable whining was found among the men who were surveyed. It is supposed that the idea of helping their partner keeps them happy. Activities like carrying things, entertaining children keep the men enrolled and give them a feeling of satisfaction.
- Fear of the Feminine: This was the last stereotype that was noted. Men try to avoid buying products that have a feminine undertone.

Female Consumers. According to Moye and Kincade (2003), women in different shopping segments have totally different shopping behaviors. They vary in terms of store patronage and attitudes. Moye and Kincade (2003) classified the buying behavior of clothes among the female consumers as below:

- Highly involved Bargain apparel shopper: They focus on bargains. This is not a very practical market for departmental stores. However it is a good market for stores with everyday low prices such as discount stores.
- Decisive apparel shopper: They have the characteristics of a bargain shopper but they buy the item without any hesitation if they like it. For such consumers store layout is very important.
- Confident apparel shopper segment: They shop independently and don't need any help. They are fashion conscious and like to keep their wardrobe up-to-date. Specialty stores will have an advantage in this segment.
- Extremely involved appearance-conscious apparel shopper: This shoppers believes that her reputation is affected by the way she dresses. Designer labels should be marketed to this segment.

Other Segments. Thompson, Lacander, & Pollio (1990) reported that contemporary married women feel that they have the ultimate responsibility for the domestic tasks and they take it as a personal constraint more than their husbands. Smith

(1999) indicated that there was not a lot of difference in the spending patterns of the urban and suburban population. However, they did differ in their propensity for out-shopping. The city households had lower income level and preferred to shop at discount stores (like Sam's) whereas suburban population was more willing to shop at department and specialty stores.

Consumer Behavior of Tourists

Tourism is one of the fastest growing industries in the world. According to the Travel Industry Association of America (TIA), more than 60% of tourists in 2004 included shopping during their trips, and the average expenditure was above three hundred and fifty US dollars. Tourism is often regarded as a display of social status as it is associated with the time and income at discretion. Carr (2002) indicated that travelers may display a different behavior from his origin country. Once an individual arrives at a destination, tourist sheds the culture of his/her home environment and assumes a tourist culture. The traveler may become less critical and tolerant. For example, the British tourists had different shopping behaviors depending on whether they were traveling within the country or internationally. The results of the study indicated that the domestic tourists were more active and less hedonistic than the international tourists. Verbeke (1991) suggested that indicators such as personal characteristics, the shop during the visit and kind of purchases, have proved to be useful in analyzing shopping tourism. The longer a tourist stays in a shopping area the stronger the leisure aspect becomes.

Spencer, Kim, & Holecek (2002) found that shopping was rarely the primary reason for the tourists to visit a place. Of the interviewees that had shopped during their latest trip, 49% reported that they did not plan to shop, 46% indicated that shopping was the secondary reason for their trip. 4% said that shopping was the primary reason for their trip and only 1% reported that shopping was the only reason for their trip. Another interesting finding was that shoppers were more likely to have purchased a travel package, or arranged the trip with a travel agent, taken flights for their trip, had an overnight stay and stayed in a hotel, motel or a lodge. Souvenir shoppers were the least likely to have taken a trip to visit their relatives and friends.

Brodowsky and Anderson (2004) reported that cross border tourism for shopping is common all over the world. They gave the example of Europe where many people cross borders just to buy cigarettes at cheaper rates. Many Japanese come to the US for casual golf tours and return with Japanese made electronics at lower prices. In USA, most people visit Mexico for over-night trips, but most of the money is spent on drinking and eating. The authors also found that if they are made to stay for more than a day they are much more likely to buy durable goods. Timothy (1995) reported that the growth of cross border shopping tourism was widely blamed for the lost in retail jobs in Canada and loss of billions of dollars in government revenue. In short, as the social and economic trends of different countries get interrelated to each other, the consumer behavioral patterns change. As a result of which a lot of focus has been on shopping as an activity of the tourists (Verbeke, 1991).

Study Purpose

This study was an attempt to discover consumer-purchasing behaviors while shopping as a tourist and shopping at home. The survey instrument was developed by a faculty member in the areas of consumer services and tourism management with students assisting in the input and data collection from both graduate and undergraduate (senior) assistants. The purposes of the study were to (1) discover consumer purchasing behaviors while shopping as a tourist and shopping at home, and (2) investigate tourist-shopping preferences for an ideal shopping environment. The outcomes of this study will be helpful for future service providers and tourism/hospitality retailers to plan product development, provide better services, and equip a wider range of service skills.

METHODS

This study combined on-site interviews and mail surveys coupled with 2-time follow-up to gather data from households of the Southeastern US region. A self-administered questionnaire was delivered to randomly selected households with an incentive offer. During the spring (February to April) of 2004, a total of one thousand questionnaires were distributed. Of these questionnaires, 735 completed and usable questionnaires were returned, giving a response rate of 73.5 percent. Returned surveys were coded and entered into a computer. Mean values for a variety of question responses of male and female groups were compared using the Statistical Analysis System (SAS) package. After determining normality in data by running a histogram and using the Komogorov-Simirnov statistic with a Lillefors significance level, a non-parametric test (the Mann Whitney test) was used in the study. Mann Whitney test and Chi-Square test were used to test the null hypothesis that no differences existed between two kinds of gender populations. The Mann Whitney test was used with interval data and Chi-Square was used with nominal variables. The null hypotheses were rejected if the probability value was less than 0.05. Statistically significant group differences are highlighted and discussed in text.

The people surveyed were asked questions concerning their perceptions regarding their uses of different shopping channels (e.g., home shopping channel, catalog shopping, internet shopping, and store shopping, etc.), various factors that affect the way they shop (e.g., economic downtimes, and store return policy, etc.), reasons why they buy souvenirs during their trips, what specific store attributes they desire when shopping as a tourist, and what kind of souvenirs they purchased during their most recent trip. The results of this project would provide useful information for marketing professionals to assist them in planning, advertising, promotions, and other marketing ventures.

RESULTS

Of 731 useful responses, 270 were males and 461 were females. The following is a summary of the key findings related to the shopping channel decisions, shopping behaviors (at home and on the road), and store choices:

Purchasing Decisions. Differences in the factors that influence shopping decisions of male and female participants were statistically significant. When asked if inflation or economic downtimes affect the way they shop, 39.33% of males and 31.65% of female respondents said “yes” respectively ($p < 0.036$). When asked if they are fearful of buying items while traveling due to the fact that they cannot return the items, 21.27% of males and 29.69% of female respondents said “no” respectively ($p < 0.013$). When asked why they buy souvenirs during their trips – the most frequent mentioned reasons were: gifts for family members [males (72.35%); female (88.22%); $p < 0.0001$], Gifts for friends [males (53.64%); female (75%); $p < 0.0001$], and gifts for personal use and consumption [males (77.57%); female (79.12%); $p < 0.625$]. When asked what percentage of their money was spent on souvenirs during their most recent trip, 232 males reported an average ‘10.13%’ and 392 females reported an average ‘17.48%’ respectively ($p < 0.0001$).

Perceptions toward store attributes when shopping as a tourist. When participants were asked about what specific store attributes make them feel about purchasing (on a 1 to 7 scale, where 1 = not at all important, and 7 = the most important), the most important store attributes according to males were “friendly staff” (5.32), “neatness and cleanliness of store interior” (5.26), “unique architecture” (3.85), “easy entry and exit” (4.40), “reflective of local culture” (4.54), “close to airport” (2.73), “close to hotel/motel” (3.33), “safe” (4.68), “socializing with my travel companions” (4.07), “wide merchandise selection” (4.99), “product brands” (4.77), “reasonable prices” (5.32), and “days and hours open for shopping” (4.73). For female consumers, the most important store attributes were “friendly staff” (5.56), “neatness and cleanliness of store interior” (5.69), “unique architecture” (3.7), “easy entry and exit” (4.41), “reflective of local culture” (4.67), “close to airport” (2.52), “close to hotel/motel” (3.33), “safe” (5.44), “socializing with my travel companions” (5.09), “wide merchandise selection” (5.47), “product brands” (5.08), “reasonable prices” (5.78), and “days and hours open for shopping” (5.38). The least important attributes to females were “unique architecture” (5.6). Differences in the “neatness and cleanliness of store interior” ($p < 0.0002$), “socializing with my travel companions” ($p < 0.0001$), “wide merchandise selection” ($p < 0.0001$), “product brands” ($p < 0.015$), “reasonable prices” ($p < 0.0001$), and “days and hours open for shopping” ($p < 0.0001$) categories for males and females were statistically significant at the 0.05 level.

Sources of Information. The three most important sources of information used while selecting a store to shop in during their trips for male consumers were friends (69.58%), previous experience (62.74%), and internet (47.47%). The most popular commercial information sources for males were television (42.35%) and attraction brochures (41.25%). The three most common sources of information used while selecting a store to shop in during trips for females consumers were friends (79.16%), previous experience (73.39%), and relatives (57.49%). The most popular commercial information sources for females were attraction brochures (47.22%) and television (46.64%). Males were more likely to use automobile clubs, newspaper advertisements, and billboard as sources of information than female consumers. The results indicate that the two types of consumers using various sources of information [previous experiences ($p < 0.003$), relatives ($p < 0.001$), friend ($p < 0.004$), magazine articles ($p < 0.016$), automobile clubs ($p < 0.024$), newspaper advertisements ($p < 0.019$), and billboard ($p < 0.043$)] were statistically significant at the 0.05 level.

DISCUSSION AND CONCLUSION

Marketers of tourism and hospitality industries may consider using strategic marketing implications based on the key findings of this study. The key findings of this study are that shopping motivations, problem perceptions, and store-attribute-influence differences exist between females and males. Females are more likely to spend on souvenirs during their trips, more likely to be fearful of buying items while traveling due to the fact that they cannot return the items, and less likely to be affected the way they shop by inflation or economic downtimes. Females were more likely to purchase something they don’t need and make an unneeded purchase than males when they receive superior service and meet high pressure salesperson at stores. In addition, females are more likely to be affected their purchasing motivations by various souvenir store attributes including “neatness and cleanliness of store interior”, “wide merchandise selection”, “product

brands”, “reasonable prices”, and “days and hours open for shopping. Males are more likely to use automobile clubs, newspaper advertisements, and billboard as sources of information than female consumers while females are more likely to use previous experiences, relatives, friend, and magazine articles as sources of information than males.

Based on the results of the study, females may be the main target of store layout and design. Even for the male stores, female opinions need to be taken in store layout and product assortment decisions. It is found that it is the combined effect of various environmental cues that affect the shopping behavior. Also, stores with incomplete selection of products would be at a disadvantage. Understanding the factors that motivate consumers/tourists is a central concept in attempts to gain knowledge of tourists’ shopping behaviors. A survey to help management identify destination problems and marketing segments would make a good future study. Future studies may consider including larger sampling regions and more diverse segments such as day visitors, business groups, and minorities.

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AN INVESTIGATION OF SIGNIFICANT FACTORS AFFECTING CONSUMER OVERALL TRUST IN A WEBSITE

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ABSTRACT

The major research goal of this study was to identify the important factors that significantly influence the formation of a consumer's overall trust in a website. By collecting empirical data through a webpage-based survey and applying principal component factor analysis and multiple linear regression analysis, this study achieved this goal. A total of five hypotheses with 20 factors were posited and tested. Six factors were identified to have significant influence on the formation of a consumer's overall trust in a website. The marketing implications pertaining to hospitality and tourism were discussed.

Key words: consumer trust, e-commerce, Internet marketing, hospitality and tourism.

INTRODUCTION

E-commerce is the sale of products and services over the Internet. Since the transactions take place without personal contact, consumers are generally concerned of the legitimacy of the vendor, authenticity of the product or service, and the confidentiality and privacy of their personal data provided to the vendor (Chen & Dhillon, 2003). Trust can be defined as the reliability, competency, and dependability of the vendor offering products or services over the Internet. Trust can be broken if the vendor engages in illegitimate businesses or when there is a general disregard for privacy and security. Since trust is essentially a value proposition that an individual might hold about the vendor and the related transactions, it can be developed and established in a relationship (Chen & Dhillon, 2003).

In the literature, Internet vendor trustworthiness has been identified as a construct that is critical for the success of E-commerce. A survey as published in CIO.com (June 25, 2002) revealed that nearly 71% of the US web users reported lack of trust in online vendors. It is therefore important for Internet vendors to build and win consumer trust so as to survive and realize financial success (Chen & Dhillon, 2003). Consequently, an increasing number of publications in the past few years have been devoted to address different aspects of consumer trust in e-commerce. However, how to build consumer trust is still an open issue for many e-vendors who are eager to harness the capabilities enabled by the Internet.

This study is complementary to the existing studies on consumer trust in e-commerce. Through reviewing the literature information in multiple disciplines, this study identifies and tests major factors that have significant impact on the formation of a consumer's overall trust in a website. This study makes contribution to the development of a theoretical understanding of consumer trust in e-commerce. In addition, it provides e-vendors with practical insights on how to design Internet marketing strategies that will initiate, develop, and maintain consumer trust. This study has particular implications for the hospitality and tourism industry. Since its advent, the Internet has been considered a very "suitable" and significant new distribution channel for hospitality and tourism products, and many well-known e-commerce brands have emerged from the hospitality and tourism industry such as Expedia.com, Price-Line.com, Oblitz, and Travelocity.

The study tests the following hypotheses: 1) Individual characteristics significantly influence a consumer's overall trust in a website. Such individual characteristics include disposition to trust (faith in humanity and trusting stance), attitude towards online shopping, perceived risk associated with online shopping, past purchase behavior (i.e., frequency of purchasing or obtaining information from any website, previous experience with non-traditional shopping means), personal values, gender, age, and education; 2) Website characteristics significantly influence a consumer's overall trust in this website. Such website characteristics include functionality, usability, efficiency, reliability, and likeability; 3) An e-vendor's reputation significantly influences a consumer's overall trust in a website; 4) Trusting infrastructure implemented on a website significantly impacts a consumer's overall trust in this website. Typical trusting infrastructure includes regulation cues (e.g., privacy and security policies) and guarantee cues (e.g., diploma and third-party seals); and 5) A consumer's repeated interactions with a website significantly influence a consumer's overall trust in this website. Indicators of repeated interactions include frequency of purchases/obtaining information from the website, frequency of receiving marketing pieces, perceived service quality, and overall satisfaction.

LITERATURE REVIEW

Any understanding of trust with respect to e-commerce should be grounded in an understanding of trust in the traditional literature, i.e., literature in disciplines that are not related to the usage of the Internet. Scholars in multiple disciplines have extensively examined the issue of trust and generated a huge body of literature on the trust construct. Nevertheless, there has been no universally accepted scholarly definition of trust (Rousseau, Sitkin, Burt, & Camerer, 1998). Two recent comprehensive literature reviews conducted by McKnight, Choudhury, & Kacmar (2002) and Chen & Dhillon (2003) reveal that competence, benevolence, and integrity are the most recurring themes in establishing trust dimensions.

In the context of business-to-consumer exchange, the notion of competence includes a company's ability to fulfill its promises communicated to consumers. Integrity refers to the fact that a company acts in a consistent, reliable, and honest manner when fulfilling its promises. Benevolence is the probability that a company holds consumers' interests ahead of its own self-interest and indicates sincere concern for the welfare of the customers. Chen and Dhillon (2003) suggest that a person's conceptions of these dimensions of a specific other's trustworthiness interact to form a composite or overall trust.

A significant body of knowledge from multi-disciplines sheds light on where trust can emerge. A close examination of these sources and their contents leads to five relatively exclusive sources of trust: 1) characteristic-based trust; 2) calculus-based trust; 3) institution-based trust; 4) knowledge-based trust; and 5) identification-based trust. Characteristics-based trust refers to that how much trust a person has in another is greatly influenced by this person's characteristics. Calculus-based trust implies that trust is grounded not only in the fear of punishment for violating consistency but also in the rewards to be derived from preserving it (Lewicki & Bunkerl, 1995). Institution-based trust refers to that one believes the necessary impersonal structures are in place to enable one to act in anticipation of a successful future endeavor (Zucker, 1986). Knowledge-based trust believes that trust is grounded in behavioral predictability, i.e., a judgment of the probability of the other's likely choice of behaviors, and it occurs when one has enough information about others to understand them and to accurately predict their likely behavior (Lewicki, et al, 1995). Identification-based trust is based on a full internalization of the other party's desires and intentions. At this level, trust exists because each party effectively understands, agrees with, empathizes with, and endorses what the other wants, and can act for the other. Identification-based trust thus permits one to act as an agent for the other, substituting for the other in interpersonal transactions (Shapiro, Sheppard, and Cheraskin, 1992).

In examining the impact of an individual's characteristics on trust formation in the consumer market, researchers have developed a comprehensive list of major antecedents of trust such as disposition to trust, personal values, culture (nationality), prior experience, attitude, subjective norm, gender, age, education, and income. In examining an individual's characteristics (e.g., a salesperson) in industry market, researchers have found that the salesperson's expertise, likeability, competence, dependability, and other personal traits have positive impact on the formation of a buyer's trust. Antecedents of trust arising from calculus-based trust source can be found in the study by Lewicki, et al (1995), who suggest that in any given transaction with another trust may be derived by determining: 1) Benefits to be derived from staying in the relationship; 2) Benefits to be derived from cheating on the relationship; 3) Costs of staying in the relationship; 4) Cost of breaking the relationship. Many authors regard that calculus-based trust is based on rational choice. Trust derives not only from the existence of deterrence but also because of credible information regarding the intentions or competence of another (Barber, 1983). The credible information about a trusted party may be provided by reputation or third-party assurances such as certification. The advanced studies indicate that calculus-based trust is major sources from which initial trust can be developed and factors such as reputation and brand recognition are important issues that help a consumer form initial trust in a company.

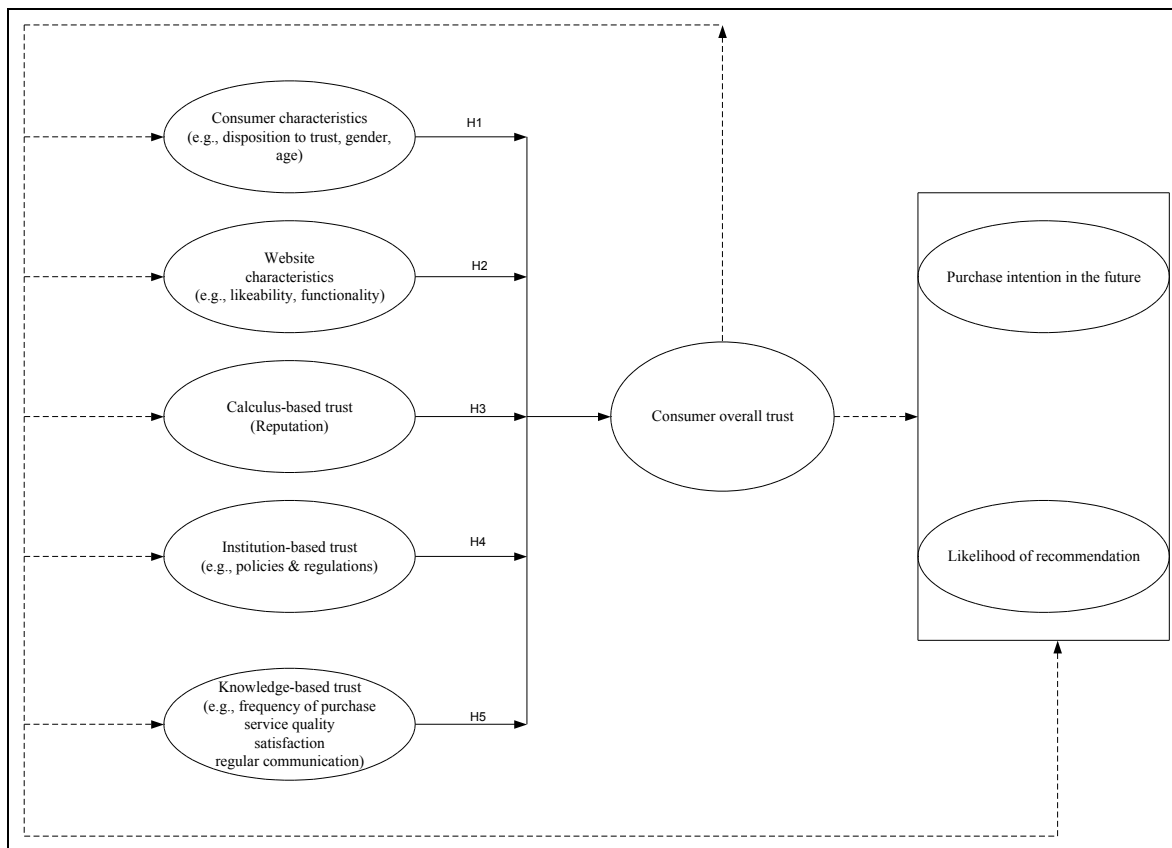
Institution-based trust is tied to formal mechanisms such as professionalism or third-party insurance, i.e., situational normality and structural assurances. Situational normality is defined as the belief that success is likely because the situation is normal or customary, or that everything seems to be in proper order (e.g., Garfinkel, 1963). For instance, a person enters a luxury hotel and expects a setting conducive to both customer service and fiduciary responsibility that is reflected in the workers' professional appearance, the prosperous and secure physical setting, and a friendly and a safe procedure. This individual then believes that this situation is normal and feels comfortable enough to quickly form some level of trust in the hotel. The belief in structural assurances can lead to trust. Shapiro (1987) defines structural assurances as structural safeguards such as regulations, guarantees, and legal recourse. Regulations such as contracts, company policies regarding privacy and security enable people to feel assured about their expectations of the other party's future behavior (e.g., Sitkin, 1995). Guarantees mitigate the perceived risk involved in forming trust in others. Legal recourse (i.e., regarding contracts and promises) functions as deterrence.

Knowledge-based trust means that familiarity between a buyer and a seller through positive repeated interactions can increase the buyer's trust in the seller. These repeated interactions include repeated purchases, regular communication and courtship (Shapiro, et al, 1992). Regular communication puts a party in constant contact with the other, which allows for exchanging information about wants, preferences, and approaches to problems. Regular communication enhances a seller's ability to understand its buyers. Courtship, as explained by Lewicki, et al (1995), is conducted by "interviewing" the other, watching the other perform in social situations, experiencing the other in a variety of emotional states, and learning how other people view the other's behavior. Courtship allows one party to gain enough information to determine whether the other can work together well. In the practice of business relationships, courtship is employed to establish long-term relationship (Shapiro, et al, 1992).

Conceptual Framework and Hypotheses

Drawing on the literature information, this study proposed a theoretical framework, presenting the antecedents and consequences of a consumer's trust in a website (see Figure 1). The antecedents, marked with asterisks and shown at the left side, are under the trust sources by incorporating the special dimensions of the e-commerce context. These antecedents consist of eight factors in consumer characteristics, five factors in website characteristics, one factor in calculus-based trust, two factors in institution-based trust, and five factors in knowledge-based trust source. Identification-based trust was found not to be a productive source for a trusting relationship between a seller and an individual buyer (Lewicki, et al, 1995), and hence, it was not included in this study. Theoretically, the identified antecedents of online trust have possible inter-correlation with each other. The consequences, two aspects of online consumer behavioral intention, likelihood to purchase from a website in the future and likelihood to recommend a website to others, are shown on the right side (this is not further discussed in this paper). A consumer's overall trust plays a mediating role between the antecedents and consequences. Trust might feedback to affect its antecedents. In addition, these antecedents might have direct effects on online consumer behavioral intention. However, this study does not formally investigate any feedback effects, inter-correlated relationships, nor examine the direct relationships between antecedents and consequences. Instead, this study focuses on identifying significant antecedents of consumer trust in e-commerce.

Figure 1
Theoretical Framework of Consumer Trust in a Web Site (drag to enlarge the figure)



METHODOLOGY

The survey instrument consisted of four sections. The first section included screening questions relating to a participant's frequency of Internet usage, previous experience with other non-traditional shopping means, familiarity and overall satisfaction with a specific website. The second section includes questions measuring website characteristics, calculus-based trust effects, institution-based trust effects, knowledge-based trust effects, and overall trust. The third section included questions measuring consumer characteristics. The fourth section included questions designed to gather demographic information and consumer behavioral intentions. The instrument was pre-tested for its content validity, completeness, readability, completion time, and webpage design. A total of 27 research experts and students were consulted. Based on the feedback, jargon words were clarified; redundant questions were removed; and some sentences were re-worded. The font, color, labels, and graphics on the web page hosting the survey instrument were changed to be more "participant"-oriented. In this survey instrument, both nominal and interval scales were used. All the statements in section 1 and section 2 were placed on 7-point Likert scales. A convenience sampling technique was used in this study. The respondents in this study were chosen primarily because they happened to log on Travel Dot Com, where the survey instrument was posted, during the specific time periods. This study implemented a web page-based survey to collect the necessary data. Data were collected in a three-week time period in spring of 2003.

Data Analysis

A total of 500 responses were received, which resulted in 300 usable ones. The discarded responses were either incomplete due to ineligibility or contained the same answer to all or almost all the questions in section 1 and 2 in the survey instrument. The usable rate was 60%. A comparison of the key respondents' demographic information in this study with that in general Internet user surveys, such as GUV's annual Internet user surveys (1994-1998) and demographic report conducted by Pew Internet & American Life Project (Cyberatlas, 2002) revealed consistent patterns indicating that the respondents to this survey were not abnormally representing a unique group of Internet users, rather, representing a group of "typical" Internet users. Descriptive summary, including Frequency and Descriptive, was used to screen the data set. Basic statistics, including mean, median, mode, sum, variance, range, minimum, maximum, skewness, and kurtosis, were checked. No values were found to be out of range or abnormal. In addition, graphics, such as box plots, stem-and-leaf, and histogram, were used to check individual variables. This study used Missing Value Analysis (MVA), an add-in in SPSS 11 version, to handle the missing values in the collected data. The system-missing values, i.e., no responses to some questions, in this study on each case and variable were less than five percent. Incorporated with user-missing values, i.e., responses to "I don't know," the total missing values on each case or variables were still less than twenty percent, which indicates that missing data is not a severe issue in this study.

A total of 54 key continuous variables were contained in Section 2 and Section 3 of the survey instrument. These variables were derived to reflect such latent variables as consumer characteristics, website characteristics, calculus-based trust effects, knowledge-based trust effects, and overall trust. Principal Factor Analysis was performed on these variables. Two negatively worded items were reverse-coded before the analysis. The latent root criterion of 1.0 was utilized for factor extraction. The cutoff point of .45 was first used for item inclusion (Hair, et al, 1998). Summated scales were created for all the ten factors by taking the average of all the items within a factor. Outliers and the major assumptions for multiple linear regression analysis, i.e., linearity, normality, homoscedasticity and independence of error terms, and non-multicollinearity, were checked before the analysis was run. Qualitative variables, also called non-metric variable, in this study were converted into dichotomous variables by splitting each variable into two groups with relatively equal cases and being coded with dummy coding. The Levene's test for the homogeneity of variances was conducted on each non-metric variable through one-way ANOVA. No significant Levene's test statistics were found, indicating that the assumption of equal variances was met and all the non-metric variables could be included in the regression analysis.

FINDINGS

The results of performing stepwise multiple regression analysis are shown below in a regression function equation, with trust as the dependent variable. Trust was regressed on 20 independent variables. All coefficients shown here are standardized beta values and significant at the level of 0.05 or better.

The Stepwise Regression Model:

$$\text{Trust} = 0.43 \text{ Reputation} + 0.18 \text{ WC} - 0.17 \text{ Risk} + 0.19 \text{ SQ} + 0.11 \text{ Satisfaction} - 0.09 \text{ Education} \quad \text{Model 1}$$

Where: 1) Reputation: the reputation of the website; 2) WC: the characteristics of the website; 3) Risk: the subject's perceived risk of shopping online; 4) SQ: the subject's perceived service quality of the website; 5) Satisfaction: the subject's overall satisfaction with the website; and 6) Education: the subject's highest level of education.

The level of support of the estimated coefficients for each hypothesis is based on the following criteria (Baloglu, et al, 1999): 1) 0.00 – 0.05 indicates weak support; 2) 0.051 – 0.30 indicates moderate support; and 3) 0.301 – 1.00 indicates strong support.

The model indicates that H1 is partially supported; H2 is fully supported; H3 is fully supported; H4 is not supported; and H5 is partially supported. In summary, a total of six variables, reputation, website characteristics, service quality, overall satisfaction, perceived risk, and education have statistically significant influence a consumer's overall trust in an e-vendor. These variables together explained approximately 65% of the variance in overall trust, indicating that the explanatory power of the function model was strong. This study compared these results with theoretical expectations, earlier empirical results, and simulation results. Overall, the results of hypothesis testing were consistent with those in existing empirical studies in e-commerce.

MARKETING IMPLICATIONS

Managers must work diligently on building brand recognition of their websites. Good reputation is the most important factor affecting consumer trust, disproportionately explaining more than 50% of the variance in overall trust. E-vendors who already have a good reputation find that it provides a good start for them. For those who are unknown or new to the Internet market, they need to apply this old wisdom in their e-marketing strategy. Successful e-branding tactics can be borrowed from Internet-leading marketers, such as expedia.com, obtiz.com, and priceline.com. These companies have created their own methods of getting consumers' attention and loyalty. Managers must make sure that they respond to consumers' inquiries in a timely manner, give each consumer individual attention, and allow consumers to track their purchases through their websites at any time. Managers must constantly monitor their targeted visitors' satisfaction. This can be done through creative post-purchase communications. Managers must also remain diligent in maintaining a "good" website. It is not only important to keep a website that is graphically pleasant as well as functionally savvy. If this website allows consumers to make purchases through it, the purchase system must be stable, reliable, and fast. Consumers would like to know how their information would be used by an e-vendor. Managers must inform their visitors how their personal information would be used in an explicit way.

Consumers with different education levels have different perceptions toward an e-vendor's trustworthiness. It is necessary for managers to be familiar with their visitors and segment them based on their education. People with less education are quick to trust e-vendors, while those who have at least some college education tend to depend on their own judgment. Managers can use attractive website features to entice less educated visitors, and pay more attention to service quality and satisfaction with well-educated visitors. Managers can also segment their targeted visitors based on their perceived risk associated with online shopping into risk-takers, risk-neutral visitors, and risk-averse visitors. Attractive web features and new products can be used to attract risk-takers, while gentle guidance can be used to entice risk-neutral and risk-averse visitors. Overall, the old business wisdoms are still applicable in e-commerce. Managers must have an integrated e-marketing program including e-branding, delivering quality service, monitoring customer satisfaction, and building consumer profiles. Managers must also have a well designed website that caters to targeted visitors.

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AN EVALUATION OF HERITAGE INTERPRETER TRAINING CURRICULUM : A CASE STUDY OF TAIWAN
TAINAN CITY

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ABSTRACT

The courses of a heritage interpreter training curriculum used in Tainan city, Taiwan was adopted into a survey as open-ended questions to acquire educators' and heritage interpreters' perceptions and comments regarding the importance of the courses. In addition to the survey, practicing heritage interpreters were interviewed to obtain in-depth information on the training curriculum. The outcomes of the survey and interviews identified a detailed training course that includes 5 categories, (1) professional knowledge category, (2) interpretation techniques category, (3) related regulations category, (4) safety and emergency handling category, and (5) on-site training category. Implications for heritage interpreters' training were also included.

Key Words: heritage interpretation, training curriculum,

INTRODUCTION

Cultural and heritage tourism comprise important sectors of global tourism (Silberberg, 1995; Richards, 2000). As international traveling increases, local communities use their unique culture and heritage to maintain and promote a unified identity (Richards, 2000). Public support can be ensured by enhancing visitors' experiences and educating visitors appropriate behaviors to conserve historical sites (Hall & McArthur, 1993). In addition, historical sites and visitor experiences can be enhanced by effective interpretation that monitors the flow of visitors, provides clear directions of safe behavior, and provides direct and indirect information that fosters visitors' appreciation and conservation of these monuments to heritage (Moscardo, 1996). A well executed interpretation by professional trained interpreters can enhance visitors' experiences greatly at heritage sites (Su, 2000). Nevertheless, few interpreters are available at historical sites in Taiwan and most of them are volunteers who have received limited training.

The best interpreters are developed through training and education (Risk, 1994). Local governments and private organizations have designed training curriculum, arranging classrooms and hiring trainers to enhance volunteer interpreters' knowledge and skills. These training courses require 30 to 120 hours of class works and field trips to various heritage sites. The trainees receive a certificate after they finished required works and passed final exams. However, the lack of standardized training curriculum makes it difficult to establish a national certification system that can assure the quality of interpretation.

The purpose of this study was to identify educators' and heritage interpreters' perceptions of current training curriculum for heritage interpreters in Taiwan. Specifically, this study attempted to identify importance ratings on the existing training curriculum from interpreters and hospitality educators. No standardized guideline has been established for the heritage interpreter training programs in Taiwan.

METHODOLOGY

Participants and Data Collection. This study includes two groups: heritage interpreters and tourism/ leisure management educators. Four hundred interpreters stationed at the 24 first ranking heritage sites in Taiwan (Tourism Bureau of Taiwan, 2003) were identified from the databases of Culture Bureaus of local governments. Twenty-three four-year degree hospitality/tourism and leisure programs in general universities, management colleges and technological colleges and universities are listed in the official websites of R. O. C. Ministry of Education (R. O. C. Bureau of Statistics at

Ministry of Education, 2004). Approximately 290 faculty members teach in tourism related programs and they were all selected.

Instrument.

The instrument entitled “Historical Interest Tour Interpreter Training Curriculum” was adapted from active training curriculum of Tainan city in Taiwan (Su, 2000). The self-administered mail survey instrument was designed to gain insight from educators and heritage interpreters regarding the level of importance of the current training courses. Participants were asked to rate the importance of the courses on a 7-point scale where 0 = not at all important, and 6 = very important.

The instrument was pilot tested for content validity by 3 faculty members with expertise in Hospitality/ Tourism management and two interpreters who have interpretation related experiences at heritage sites. Thirty graduate students in hospitality management programs in the U.S. who are fluent in both Chinese and English were purposely selected to establish reliability of the questionnaire. After being reviewed, the instrument was translated into English for an English pilot study. The English version was retranslated back to Chinese by a group of Chinese graduate students who were not involved in the instrument development. An open-ended section was added to the pilot questionnaire to solicit respondents’ suggestions for improving the instrument. The coefficient alpha for Chinese and English version was .88 and .91, showing high scale reliability.

Data Analysis

Data were analyzed by descriptive statistics, factor analyses, and analysis of variances (ANOVA). For descriptive statistics, frequency distributions and percentages were calculated to display the respondent’s demographic profile. Factor analysis was conducted to identify related constructs and to create composites from the training curriculum, and factors that explain most of the variances between the competencies. One-way ANOVA was applied to examine the perceived differences between educators and interpreters on training curriculum

RESULTS AND DISCUSSION

Characteristics of Respondents.

The majority of the educators were female (60.8%). The age groups ranging from 31 to 40 (45.9%) and 41 to 50 (33.8%) were the largest groups. Over half of the respondents (54.6%) have been at their current positions between one to six years. The majority of the interpreters were female (60.9%). Over half (59.8%) of the interpreters were between ages 41 to 60 with the primary job title being contract interpreter (55.6%). Concerning years in current position, the majority of the respondents have worked at their current positions between one to six years (51.1%). The educational level that was indicated the most by the respondents was bachelor (37.4%), some college (26.7%), and high school graduate (26%).

Dimensions of Educator and Interpreters’ Perception of Current Training Curriculum.

Principal component factor analysis with varimax rotation procedures was employed to identify dimensions of the educators and interpreters’ perceptions of current training curriculum (Table 1). The factor analysis extracted two factors that explained 65% of the variances. The factors were identified and named. The first factor was labeled “Local Custom and Communication Skills”, and the second factor was labeled “Heritage and History”.

The first factor shows an eigenvalue of 5.31, which explains 34.95% of the total variance, and has a Cronbach’s alpha of .93. This factor is described by 10 items. “Local proverbs and local legends” (0.812) and “Local custom” (0.794) were considered to be the most important issues in interpreter training curriculum. The second factor shows an eigenvalue of 4.30, which explains 29.66% of the total variance, and has a Cronbach’s alpha of .90. This factor is described by 6 items. Variables most highly correlated with training curriculum were “Refined interpretation of the literature and history and cultural relics” (0.830), “Appreciation of painting and drawings” (0.813), and “Seminar on traditional architecture” (0.787).

Training Curriculum Courses Rating.

Heritage interpreters’ perceptions of importance of existing training curriculum were determined by calculating the means of their ratings on the scale. They perceived “field trips to the heritage sites”, “interpretation skills and techniques at heritage sites”, “present and past history of heritage sites”, “interpersonal communication skills” and “geographical and societal changes of heritage sites” as the most important courses for interpreter training. Interpreters rated the courses with means ranging from 5.61 to 5.27. The result shows that all sixteen training courses are considered from “very important” to “extremely important” from the heritage interpreters’ point of view according to reassigned interpretive meaning set by the researcher.

Hospitality educators and heritage interpreters perceived “field trips to the heritage sites”, “interpretation skills and techniques at heritage sites”, “present and past history of heritage sites”, “geographical and societal changes of heritage sites”, and “interpersonal communication skills” as the most important courses for interpreter training. Educators rated the courses with means ranging from 5.39 to 4.93. The results from educators also indicated that all training courses are considered as “very important” to “extremely important” according to reassigned interpretive meaning set by the researcher.

Table 1
Principle Component Analysis of Factors of the Current Training Curriculum
that are Required by Heritage Interpreter

Factor	Loadings	Eigen value	% of Variance	Alpha
Factor 1: Local Custom and Communication Skills		5.31	34.95	.93
Q63. A look at the native Taiwan local proverbs and local legends	0.8126			
Q64. Local customs	0.7943			
Q70. Interpersonal communication skills	0.7375			
Q67. Introduction of preserving heritage assets	0.7087			
Q65. Seminar on regional arts & crafts	0.7025			
Q69. Ecology in the heritage interest area	0.6867			
Q62. Overview of Taiwan folk arts	0.6784			
Q71. Field trips to the heritage sites	0.6175			
Q68. Interpretation skills and techniques at heritage sites	0.5796			
Q66. Issues of interpretation and regulation at heritage sites	0.5566			
Factor 2: Heritage and History		4.30	29.66	.90
Q57. Refined interpretation of the literature and history and cultural relics	0.8306			
Q59. Appreciation of painting and drawings of heritage sites	0.8130			
Q58. Seminar on traditional architecture	0.7877			
Q56. Present and past history of heritage sites	0.7167			
Q61. Who's Who in local history	0.6902			
Q60. Geographical and societal changes of heritage sites	0.5770			
Total			64.61	

Comparisons of the results showed that interpreters and educators reach a consensus on the important courses required by the heritage interpreter training in spite of ranking differences. The courses that both groups ranked the highest were as follows: “Field trips to the heritage sites”, “Interpretation skills and techniques at heritage sites”, “Present and past history of heritage sites”, “Interpersonal communication skills”, “Geographical and societal changes of heritage sites”, “Seminar on traditional architecture”, “Who's Who in local history”, with mean ranging from 4.79 to 5.22. However, educators and interpreters did not reach a consensus on the remaining training courses.

Three components, (a) knowledge of the resources; (b) knowledge of the visitors; and (c) knowledge of interpretive methods, were considered as indispensable to effective interpretation (Gross & Zimmerman, 2002). The rankings correspond with these components “interpretation skills and techniques” as knowledge of interpretive methods, “present and past history,” “geographical and societal changes,” and “traditional architecture” as knowledge of the resources. “Interpersonal communication skills” helps the interpreters become familiar with interacting with the visitors of the heritage sites, which also becomes the essential component for building the knowledge of visitors. Field trip, one type of experiential learning that offers opportunities for trainees to practice what they have learned, was ranked the highest by both educators and interpreters.

Though the overall perceived importance toward training curriculum courses rated by educators and interpreters were generally positive, it is important to know whether there were any significant differences in importance levels by the two groups. One-way analysis of variance (ANOVA) was used to examine the perceived differences between educators and interpreters on training curriculum (Table 2).

The two groups were consistent in their importance levels of courses of “Geographical and societal changes of heritage sites”, “Introduction of preserving heritage assets”, “Interpretation skills and techniques at heritage sites”, and “Field trips to the heritage sites.” Significant differences between the two groups were found in the following course areas: “Present and past history of heritage sites” (Educator = 5.11; Interpreter = 5.40, $p = .016$), “Refined interpretation of the

literature and history and cultural relics" (Educator =4.57; Interpreter =5.18, $p=.000$), "Seminar on traditional architecture" (Educator =4.84; Interpreter =5.23, $p=.003$), "Appreciation of painting and drawings of heritage sites" (Educator =4.55; Interpreter =5.11, $p=.000$), "Geographical and societal changes of heritage sites" (Educator =5.01; Interpreter =5.27, $p=.048$), "Who's Who in local history" (Educator =4.80; Interpreter =5.24, $p=.001$), "Overview of Taiwan folk arts" (Educator =4.73; Interpreter =5.11, $p=.005$), "A look at the native Taiwan local proverbs and local legends" (Educator =4.53; Interpreter =5.11, $p=.000$), "Local customs" (Educator =4.72; Interpreter =5.22, $p=.000$), "Seminar on regional arts & crafts" (Educator =4.77; Interpreter =5.11, $p=.020$), "Issues of interpretation and regulation at heritage sites" (Educator =4.55; Interpreter =4.99, $p=.003$), "Ecology in the heritage interest area" (Educator =4.61; Interpreter =5.04, $p=.003$), and "Interpersonal communication skills" (Educator =4.95; Interpreter =5.30, $p=.010$).

The fact that the interpreters consistently perceived listed training courses as more important than did the educators might due to all the participated interpreters received interpretation trainings while only about 40% of the educators received any interpretation training and/or served as trainers for interpretation training programs. Therefore, the educators might evaluate the importance of training courses in different perspectives. No study has conducted to compare the perceived differences between educators and interpreters regarding interpretation training courses. Further studies need to be conducted to identify the reasons cause the differences.

Table 2
Significant Differences in Interpreter Training Curriculum Based on Groups of Educator and Interpreter

Item Description	Educator		Interpreter		F-value	p
	Mean	SD	Mean	S D		
Present and past history of heritage sites	5.09	0.89	5.39	0.78	6.373	*.012
Refined interpretation of the literature and history and cultural relics	4.58	1.14	5.17	0.84	17.953	*.000
Seminar on traditional architecture	4.83	0.89	5.22	0.91	8.786	*.003
Appreciation of painting and drawings of heritage sites	4.55	1.07	5.11	0.92	15.487	*.000
Geographical and societal changes of heritage sites	5.02	0.99	5.27	0.84	3.515	.062
Who's Who in local history	4.79	0.97	5.24	0.90	10.877	*.001
Overview of Taiwan folk arts	4.72	0.89	5.11	0.93	8.269	*.004
A look at the native Taiwan local proverbs and local legends	4.52	1.07	5.11	0.93	16.665	*.000
Local customs	4.71	1.07	5.22	0.86	13.351	*.000
Seminar on regional arts & crafts	4.77	1.10	5.11	0.94	5.526	*.020
Issues of interpretation and regulation at heritage sites	4.55	1.17	4.99	0.92	8.798	*.003
Introduction of preserving heritage assets	4.70	1.06	4.98	1.04	3.386	.067
Interpretation skills and techniques at heritage sites	5.25	0.90	5.42	0.79	1.906	.169
Ecology in the heritage interest area	4.60	1.05	5.03	0.92	9.396	*.002
Interpersonal communication skills	4.93	1.10	5.30	0.85	7.199	*.008
Field trips to the heritage sites	5.39	0.94	5.61	0.69	3.568	.060

*0 = Not at all important, 6 = very important

CONCLUSION

This was the first study to analyze educators' and interpreters' perceived importance on the training courses for heritage interpreters in Taiwan. The results support the previous findings that interpretation curriculum is complex and requires a great breadth and depth of competency (Wu, 2001). In pursuing our research purpose, we gained additional insights into educator and interpreter's views on the training courses needed for heritage interpreters in Taiwan. Based on this study, a new component, On-Site Training, is added to the Taiwanese national park interpreter training curriculum model developed by Wu (2001) because practical experiences were considered one of the most important components of the heritage-training curriculum addressed by both groups of educators and interpreters. The details of revised training courses are listed as follows:

I. Professional Knowledge Category:

1. Literature: Chinese Literature
 2. History: (a) Local Characters, (b) History Origin, (c) Contemporary Chinese History, (d) Taiwan's History, and (e) Geographical and Societal Changes of Heritage Sites.
 3. Architecture: (a) Seminar on Traditional Architecture, (b) Architectural Drawing, (c) Architectural Photography, and (d) Heritage Sites Building and Construction, and (e) Temple Introduction.
 4. Art: (a) Art Education and Appreciation, and (b) Appreciation of Painting and Drawings.
 5. Cultural Relics: (a) Seminar on Regional Arts and Crafts, (b) Local Customs, (c) Native Taiwan Local Proverbs, and (d) Overview of Taiwan Folk Arts.
 6. Ecology: Ecology System in the Heritage Area.
- II. Interpretation Techniques Category:
1. Interpretation Skills: (a) Interpretation Skills and Techniques, (b) Interpretation in a Second Language, (c) Interpretive Material and Presentation Media.
 2. Communication Skills: (a) Interpersonal Communication Skills, (b) Etiquette.
 3. Technology: Virtual Interpretation.
- III. Related Regulations Category:
1. Introduction of Preserving Heritage Assets.
 2. Issues of Interpretation and Regulations.
- IV. Safety and Emergency Handling Category: Basic Training in First Aid.
- V. On-Site Training Category:
1. Field trip.
 2. Internship.

This study states that training curriculum should consist of professional knowledge, interpretation skills and techniques, and practical experiences. Heritage interpreters should be required to finish all the courses offered by this proposed model at a minimum level prior to start their interpretation careers. The training courses identified in this study support and coincide with prior propositions and research on the National Park Interpretation Services (Chen, 1998; Su, 2000; Wu, 2001).

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COMPETENCIES OF HERITAGE INTERPRETERS IN TAIWAN

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ABSTRACT

The purpose of this study was to establish conceivable indexes of professional competencies for heritage interpreters in Taiwan. A self-report survey was distributed to hospitality educators, hospitality students, heritage interpreters, and heritage tourists' to determine their perceived importance of competencies on heritage interpreters in Taiwan. Work attitude, basic employability skills, theories of interpretation education, field work of interpretation knowledge, preparation and planning of interpretation, skills and training of interpretation, research ability, and handling emergency situation are recognized to be important to professional heritage interpreters.

Keywords: Heritage Tourism, Heritage Interpreter, Competency.

INTRODUCTION

Many tourist select activities that will help them understand and experience different cultures; this is considered as "heritage tourism" (Li, 2003). Heritage tourism is a segment of cultural tourism (Richards, 1996) and is the fastest growing sector of the tourism industry in recent years (Ashworth, 2000; Ryan & Dewar, 1995) It offers new opportunities for economic growth in historical cities (Jansen-Verbeke, 1997).

Taiwan (Formosa) has experienced various cultures and ruling countries in the past. With diverse history, the island state is rich with heritage and has many historical sites including old city walls, fort battlements, administrative offices, study halls, mansions with massive gardens, family shrines and temples, tablets and stele, memorial arches, gravesites, and other architectural sites. Taiwan's pioneers developed and cultivated the country; they worked hard with a spirit of fortitude that is portrayed in these historical sites (Historical sites of the first rank in Taiwan and Kinmen, 2003). By 2003, five hundred and nine historical sites in Taiwan were identified and 24 were recognized as the first rank historical sites for which they receive the most careful maintenance and attention. Recently, local organizations and governmental units have put numerous resources to sustain the valuable historical assets in Taiwan.

Interpreters, who serve as the interface between the destination and the visitors, are the most direct and effective means in interpretive services (cited in Yen, 2001). Ryan and Dewar (1995) first introduced the "communication competency" to evaluate the communication processes between interpreters and visitors. The researchers emphasized the need for developing appropriate training courses for improving interpreters' communication competencies.

Building upon the competencies identified by the U.S. National Park Service, Yen (2001) classified core interpretation competencies into "Basic Work Skill", "Professional Knowledge" and "Professional Ability." The researcher further suggested that that the participants considered "employment ability" as the most important competency, followed by "practical experience of interpretation"; the least important categories were "safety and emergency handling skills," "knowledge of theories of interpretation," and "research ability". Results also indicated that experienced interpreters rate the majority of skills and competencies at a high level of importance (Yen, 2001, p. 75). In addition, Yu (1999) reported that "work attitude" was the most important competency, followed by "self development," "interpretation skills," "related knowledge," "administrative," and "basic knowledge". Both interpreters and volunteer interpreters were found to prefer to take courses on self-development and less desire for courses in administration. Moreover, Weiler (1999) categorized the interpretation competencies of eco-tour guides in Australia into: "minimal impact techniques," "sensitivity to local environment and culture," "an underpinning knowledge of ecological sustainability," and "conservative issues". The researcher suggested that a gap exists between the training of the eco-tour guides and their job performance that needs to be addressed in the future.

No reference were identified on heritage interpretation in Taiwan, therefore, the purpose of this study was to establish conceivable indexes of professional competencies for heritage interpreters in Taiwan. Specifically, this study intended to determine hospitality educators, hospitality students, heritage interpreters, and heritage tourists' perceived importance of competencies on heritage interpreters in Taiwan.

METHODOLOGY

Sampling and Data Collection

The participants of this study included four groups: heritage interpreters, tourism/leisure management educators and students, and heritage tourists. Four hundred interpreters stationed at the 24 first ranking heritage sites in Taiwan (Tourism Bureau of Taiwan, 2003) were included in this study. The rosters of interpreters were identified from the databases of Culture Bureaus of local governments that were responsible for training interpreters for heritage sites.

Twenty-three four-year bachelor degree granting hospitality/tourism and leisure programs listed in the official websites of R. O. C. Ministry of Education (R. O. C. Bureau of Statistics at Ministry of Education, 2004) were selected. Approximately 290 faculty members who teach in these tourism related programs and 5,000 junior and senior level college students enrolled in Tourism/Leisure Management programs at four-year universities and colleges in Taiwan during the 2004-2005 academic year were invited to participate in the study.

Tourists who visited five randomly selected first rank heritage sites during the timeframe were included in this study. The sampling procedure was systematic sampling, after the first tourist was randomly selected at the site; every 10th tourist was approached to request their participation. Each tourist was notified that their participation was voluntary and the confidentiality of their responses was guaranteed.

Design and Development of Instrument

The questionnaire originally designed to investigate interpreters competencies in Taiwanese national parks (Yen, 2001) was adopted. The instrument consisted of three domains with fifty-five competency statements. *The Basic Work Skill domain* measured the perceived importance concerning the work attitude and employment ability. *The Professional Knowledge domain* addressed the perceived importance of understanding theories, principles, or practices related to the interpretation field. *The Professional Ability domain* measured abilities of planning and preparation of interpretation, communication, research in monitoring and identified whether the interpreter was informed of the latest developments in the interpretation field, and emergency handling. The competency importance rating module used a 7-point scale where 0=not at all important and 6=very important. The reliability of each dimension of the original questionnaire ranged from 0.7018 to 0.8002.

Data Analysis

The demographic information of the participants and their responses on perceived competencies importance was summarized by descriptive statistics. The differences among interpreters, educators, tourists, and students toward professional competencies of heritage interpreters in Taiwan were analyzed using one-way analysis of variance (ANOVAs) to identify the significant difference among groups. Means were separated by Tukey Honesty Significant Difference (HSD) tests.

RESULTS AND DISCUSSION

The reliability coefficient alpha of individual scales in the instrument, such as "Work Attitude Category", "Basic Employability Skills Category", "Theories of Interpretation Education Category", "Field Work of Interpretation Knowledge Category", "Preparation and Planning of Interpretation Category", "Skills and Training of Interpretation Category", "Research Ability Category", and "Handling Emergency Situation Category", ranged from .85 to .94.

The majority of the educators in this study were female (60.8%). The largest age groups ranged from 31 to 40 (45.9%) and 41 to 50 (33.8%). Over half of the respondents (54.6%) have been at their current position between one to six years. The majority of the educators were lecturers (41.9%) and assistant professors (31.1%). The most frequently mentioned academic majors for educators include "Leisure & Tourism Management" (22.97%), "Hospitality" (14.86%), "Business" (9.45%), and "Food Science & Technology" (8.11%).

The majority of the interpreters were female (58.6%). Over half (59.6%) of the interpreters were between ages 41 and 60 with the primary job title being contract interpreter (48.9%). The most frequently mentioned academic majors for

interpreters included “Business”(15.79%), “Education” (9.02%), “High School and Vocational High School” (6.77%), “Leisure & Tourism Management” (5.26%), “Engineering” (5.26%), and “Literature”(5.26%).

Table 1
Mean and Standard Deviation of the Interpreter Competency Categories

Competency Categoror	Educator		Interpreter		Student		Tourist	
	Mean*	SD	Mean	SD	Mean	SD	Mean	SD
Work Attitude	(3**)5.03 ^a	0.67	(1)5.34 ^b	0.70	(3)5.18 ^b	0.56	(3)5.27 ^{bc}	0.53
Basic Employability Skills	(7)4.63 ^a	0.76	(7)4.87 ^{ab}	0.69	(7)4.90 ^b	0.59	(7)4.86 ^{ab}	0.68
Theories of Interpretation Education	(6)4.68 ^a	0.89	(6)4.94 ^{ac}	0.76	(5)4.96 ^b	0.71	(6)4.96 ^{bc}	0.76
Field Work of Interpretation Knowledge	(5)4.82 ^a	0.88	(5)5.01 ^{ab}	0.83	(6)4.93a ^b	0.73	(4)5.09 ^b	0.67
Preparation and Planning of Interpretation	(4)4.95	0.74	(4)5.09	0.72	(4)5.03	0.70	(5)5.08	0.73
Skills and Training of Interpretation	(2)5.06	0.81	(2)5.28	0.74	(2)5.27	0.67	(2)5.29	0.63
Research Ability	(8)4.42	1.12	(8)4.75	0.84	(8)4.56	0.85	8)4.69	0.98
Handling Emergency Situation	(1)5.14 ^a	0.87	(3)5.27 ^{ab}	0.81	(1)5.44 ^b	0.74	(1)5.41 ^{ab}	0.77

*0 = Not at all important, 6 = very important.

**The number in parentheses represented the ranking of competency categories of each group.

^{a,b,c} Means with different superscript within same row are differ, $p < .05$.

The majority of the students who participated in this study (82.6%) were female. Most students were between 21 to 30 years old. The majority of the respondents indicated that schools offered interpretation courses (80.7%). Over half (50.7%) of the students have taken interpretation courses before. Most respondents (81.6%) do not think schools need to offer more interpretation courses. Forty-two percent of students showed a willingness to be an interpreter after they graduate from school. The majority of the tourists (61.1%) were female.

All except interpreter groups perceived “the Handling Emergency Situation Category” as the most important category (Table 1). A consensus was reached by all four groups on the second important category “Skills and Training of Interpretation Category” and they all considered that “Research Ability Category” as the least important category. These results suggest that interpreters are considered a practical profession that often needs to interact with tourists at heritage sites, so the knowledge of emergency handling skills and interpretation skills are considered the most important by all participants.

Five competency categories in the survey questionnaire reflected significant mean differences between educators, interpreters, students and tourists. Interpreters and tourists believed that the “Work Attitude Category” is more important for heritage interpreters than do educators (Educator = 5.03; Interpreter = 5.34; Tourist = 5.27, $p = 0.012$). Students believed that the “Basic Employability Skills” is more important for heritage interpreters than do educators (Educator = 4.64; Student = 4.90, $p = 0.030$). Students and tourists considered that the “Theories of Interpretation Education Category” is significantly more important than do educators (Educator = 4.68; Student = 4.96; Tourist = 4.96, $p = 0.04$). Tourists believed that the “Field Work of Interpretation Knowledge Category” is more important than do educators (Educator = 4.82; Tourist = 5.09, $p = 0.04$). Students indicated that the “Handling Emergency Situation Category” is more important than do educators (Educator = 5.14; Student = 5.44, $p = 0.012$).

No differences were found in “Preparation and Planning of Interpretation Category”, “Skills and Training of Interpretation Category” and “Research Ability Category” between the four groups. Although significant differences existed between educators, interpreters, students, and tourists’ responses on a few competency categories, the rank ordering of the four groups in each of the eight categories was remarkably similar. In conclusion, rank differences were more important in analyzing the results of this study than mean differences because the ranking orders outlined the importance of competency categories that help to form standardization for the training curriculum for heritage interpreters in the future.

Table 2 summarized the five most a important competency statements and the six least important competencies agreed upon by the four groups that participated in this study. As seen in the table, even the least important competencies, fall into the “high” importance rating category which means all fifty-five competency statements were considered important

by the participants. Although the importance of the rating obtained from four groups of participants varies on 55 competency statements listed, the following competencies were rated as the most important by the four groups that received mean scores between 5.24 to 5.54: “Treats people with respect,” “Helps visitors with realistic visiting experience,” “Good communication skills,” “The content of interpretation is informative,” and “Can maintain the safety of oneself and tourists.” It is interesting to note that the research ability category is considered as the least important category while the “whether the content of the interpretation is informative” is also considered as important correctness of the content that the interpreter delivers to the audience is important and requires the interpreters to acquire research abilities.

Table 2
Mean Response of the Most and Least Important Competencies Identified by the Four Groups (N = 612)

Item Description	Mean Response ^b				
Competency Statement	Category ^a	Tourist	Student	Interpreter	Educator
Most Important					
1. Treats people with respect (Q02)	WA	5.52	5.42	5.39	5.35
2. Helps visitors with realistic visiting experience (Q10)	WA	5.44	5.40	5.46	5.25
3. Good communication skills (Q14)	BES	5.54	5.52	5.45	5.32
4. The content of interpretation is informative (Q42)	STI	5.50	5.46	5.47	5.31
5. Can maintain the safety of oneself and tourists (Q53)	HES	5.48	5.51	5.41	5.24
Least Important					
1. Accommodates visitors' special needs (Q12)	WA	4.51	4.48	4.84	4.32
2. Can handle paper work (Q16)	BES	3.79	3.80	4.09	3.79
3. Can use informational technology (Q17)	BES	3.88	3.86	4.17	3.85
4. Understands current trends and general conditions of domestic and overseas interpretation education (Q27)	TIE	4.65	4.79	4.72	4.32
5. Can design different forms of interpretive media (Q49)	RA	4.69	4.56	4.71	4.43
6. Can compile the interpretation materials for professional publications (Q50)	RA	4.34	4.00	4.46	3.93

^aWA=Work Attitude; BES= Basic Employability Skills; STI= Skills and Training of Interpretation; HES= Handling Emergency Situation; TIE = Theories of Interpretation Education; RA= Research Ability
^b0 = Not at all important, 6 = very important

All 55 competency statements were rated by all four groups as “important.” However, the most important competency statements fell into the categories of “Work Attitude”, “Basic Employability Skills”, “Skills and Training of Interpretation” and “Handling Emergency Situation.” Which is agree with Yu (1999), who suggested that “work attitude” and “interpretation skills” are important competency categories in determining the success of museum interpreters. Furthermore, all participants agreed that communication skill is an important competency for performing quality interpretation; this result further supports Ryan and Dewar’s argument (1995) that improving communication competencies of interpreters are important. Interpretation theory and research abilities are considered as two of the least important competency categories that support the findings of Yen’s (1999) study. Nevertheless, the “emergency handling situation” is considered as one of the most important competency categories in this study (1999) concluded that this is the least important competency in the national park setting.

The participating interpreters reported a stronger agreement on the competency rating on “the content,” “helps visitors with realistic visiting experience,” and “communication skills.” This findings demonstrate that interpreters tend to rate higher on all the competencies. It was interesting that interpreters rated “the content of the interpretation is informative” as the most important competencies. This maybe caused by interpretation being defined as “an educational activity” (Tilden, 1977), thus, the content of the interpretation needs to be considered even before interacting with the visitors at the heritage sites.

CONCLUSION AND IMPICTATION

Heritage tourism is the fastest growing sector of the tourism industry (Ashworth, 2000; Ryan & Dewar, 1995). With the increasing numbers of tourists and tourism activities, management and interpretation has become major issues of maintaining heritage sites (Wang, 2000). Interpreters are an important bridge between visitors and exhibits; the professional

competencies of interpreters greatly impact the quality of interpretation and visitors experiences, as well as influence their desire to revisit the sites in the future (Cheng, 2002).

This study provides desirable competency lists that are essential to be included in job descriptions and training for interpreters. A list of desirable competencies identified in this study can be used as a starting point and foundation for further design and to develop a directory of Taiwan's heritage interpreters' competencies.

These findings illustrate that similarities and differences exist between educators, interpreters, students, and visitors that can provide some valuable information that can be used to build a checklist of the important competencies that need to be possessed by all heritage interpreters. As there is a clearer definition of interpreter competencies and expectations, future heritage interpreters should find it easier to plan their own professional career track while they start their interpretation career.

These findings compare the different opinions between educators, interpreters, students, and tourists concerning interpreters' competencies. This should be useful for interpretation related training programs to establish evaluation programs according to the competency statements indicated in the study. With these indicators, related training programs can clearly understand what should be evaluated for their interpreters.

Based on the information generated from this research, the following recommendations are suggested:

- 1) To have a meaningful evaluation of heritage interpreter training curricula, there should be a substantial input from academia, interpreters, and tourists.
- 2) The ratings of desirable competencies for heritage interpreters should become an index for all heritage interpreters in Taiwan. Interpreters should have opportunities to evaluate their own strengths and weaknesses, and at the same time relate the critical competencies to their training curricula.
- 3) Due to important relationships between interpreters and Taiwan's tourism industry, it will become increasingly important in the next decade for the interpreters to be competent and perform quality interpretation at the heritage sites.

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AN EMPIRICAL INVESTIGATION OF ANTECEDENTS OF TOURISTS' SATISFACTION

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ABSTRACT

The purpose of the study was to discover underlying factors that influenced tourists' overall satisfaction and test empirically the significance of these factors. Based on a comprehensive literature review, seven factors were identified that might affect tourists' overall satisfaction with their traveling experience. On site survey was conducted in a major tourist destination in the Midwest USA, soliciting 345 responses from the visitors. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) supported a seven-factor model as conceptualized a priori by the researcher. A subsequent multiple regression analysis examined the relative impact of these seven factors on tourists' overall satisfaction.

Key Words: overall satisfaction, attribute satisfaction, confirmatory factor analysis, exploratory factor analysis

INTRODUCTION

The last two decades have seen a dramatic increase in consumer satisfaction research (Woodruff and Gardial 1996). Companies are using customer satisfaction data to determine service/product quality and increase customer retention. Many empirical studies have documented that customer satisfaction culminates in higher customer loyalty, positive WOM recommendations, increased market share and profitability (e.g., Fornell and Wernerfelt 1987; Rust and Zahorik 1993). Therefore, consumer satisfaction is essential to corporate survival due to its substantial bottom-line financial implications as well as quality and service considerations.

Most early research work focused on satisfaction at the global level (cf. Oliver 1980). Until recently, there emerges an attribute-level conceptualization of the antecedents of satisfaction (e.g., Oliver 1993). Overall satisfaction is "an overall evaluation based on the total purchase and consumption experience with a good or service over time" (Anderson, Fornell, and Lehmann, 1994, p. 54); while attribute satisfaction is "the consumer's subjective satisfaction judgment resulting from observations of attribute performance" (Oliver, 1993, p. 421). Under an attribute-level approach, overall satisfaction is a function of attribute-level evaluations (LaTour and Peat 1979). These evaluations typically capture a significant amount of variation in overall satisfaction (Bolton and Drew 1991; Oliver 1993). The multi-attribute model has two main advantages. First, consumers are more likely to use attributes than the overall product for making post-purchase evaluations (Gardial et al., 1994). Second, an attribute level analysis provides higher diagnostic value because specific questions can be asked about each attribute for determining if certain attributes are more critical in predicting overall satisfaction than others. Due to its higher specificity and actionability, managers have long been using multi-attribute model for making resource allocation decisions (Griffin and Hauser 1993).

It is important in tourism to distinguish overall satisfaction from satisfaction with individual attributes. The particular characteristics of tourism have a notable effect on tourist satisfaction (Seaton and Bennett, 1996). Beyond the generic characteristics that distinguish services from goods, such as intangibility, inseparability, heterogeneity and perishability (Zeithaml, Parasuraman & Berry, 1985), there are some further differences between tourism and other services. For example, Middleton and Clarke (2001) highlighted interdependence - sub-sector inter-linkage of tourism products. Tourists experience a medley of services such as hotels, restaurants, shops, attractions, etc.; and they may evaluate each service element separately. Kozak and Rimmington (2000) demonstrated satisfaction with various components of the destination leads to overall satisfaction. Lounsbury and Hoopes' (1985) empirical data supported that overall vacation satisfaction is a function of satisfaction with specific aspects, such as accommodation, weather, and amount of money spent. Weiermair and Fuchs' study (1999) confirmed a positive linear relationship between tourists' overall satisfaction and satisfaction with each domain/dimension of tourist destination. Therefore, overall satisfaction and attribute satisfaction are distinct, though related, constructs (Oliver 1993).

In spite of extensive literature from other disciplines demonstrating that overall satisfaction with respect to some domain is directly related to satisfaction with components of that domain, there exists relatively few research in tourism

that explore the relationship between attribute satisfaction and overall satisfaction. To help enrich the tourist satisfaction literature, this study focused on investigating overall satisfaction, attribute satisfaction, and the relationship between the two. The empirical investigation was carried out in a major tourism destination in the state of Arkansas – Eureka Springs, named one of 12 Distinctive Destinations by the National Trust for Historic Preservation in 2001. The main purpose of this study was to investigate attributes influencing tourists' overall satisfaction. Specific objectives of the study were to 1) identify and validate the underlying factor structure of tourists' attribute satisfaction; and 2) assess the relationship between attribute satisfaction and overall satisfaction.

LITERATURE REVIEW

Components of Attribute Satisfaction

According to Cooper, Fletcher, Gilbert, and Wanhill (1998), destinations are amalgams comprising the core components of attractions and support services. Attractions, be they artificial features, natural features or events, are what draw tourists to a destination; while support services and facilities, such as accommodation, food, shopping, transport, are also essential for the destination. For tourists to have satisfactory vacation experience, it is vital that the quality of each component and the delivery of the services at these components are reasonably uniform. Likewise, Laws (1995) grouped the elements of tourist destinations into two categories. Primary resources include climate, ecology, cultural traditions, traditional architecture and land forms; and secondary resources are the developments introduced specifically for tourists such as hotels, catering, transport, activities and amusements. Both elements need to be in place before tourism can be supported - tourists will not be able to enjoy a destination's primary resources without the secondary facilities available. Middleton (1988) classified the components of tourist destinations into 1) the natural and man-made attractions of an area, 2) its facilities and services, 3) the ease of access to it, 4) the images used to attract tourists to it, and 5) the total cost of the holiday. He emphasized the interdependence of the many elements in destination systems that together form the basis of tourists' experience.

Dimensions of Attribute Satisfaction

The quality of tourism products/services provided in a tourist destination has major influence in overall tourist satisfaction (Otto and Ritchie, 1995; Taylor and Baker, 1994; Anderson, Fornell & Lehmann, 1994). Keane (1997) stated that tourism destinations can build high levels of customer satisfaction and customer loyalty by selling premium service quality. In highly competitive environment, the reputation of a tourism destination largely depends on its perceived service quality. Besides, a number of non-quality issues also help form satisfaction judgments (Taylor and Baker, 1994), for example, price and perceived value of the products and/or service (Keane, 1997). For a tourist destination to be competitive, not only should the tourism services/products be perceived as of a quality similar to and/or better than those of other similar destinations; but the price should also be perceived as being competitive and commensurate to the perceived value of the products/services (Stevens, 1992). Laws (1995) stated that visitors distinguish tourist destinations from one another by identifying the variety, quality and range of activities and amenities each destination provides. Weiermair and Fuchs (1999) adopted a multi-attribute model in deciphering tourist satisfaction. They measured a range of quality dimensions such as aesthetics/appearance, security/safety, service orientation, variety/fun, and accessibility of service, in several domains of tourism activities including food, accommodation, attractions, activities, shopping, and transportation.

METHODOLOGY

Survey Instrument

A self-administered questionnaire was developed to capture the 'satisfaction' constructs and tourists' demographic profiles. 1) *Attribute Satisfaction* Drawing upon the most relevant tourism literature and destination attributes applicable to the Eureka Springs situation, an attribute list consisting of 33 items was established. The destination attributes encompassed seven domains of tourism activities: accommodation, dining, shopping, attractions, activities & events, environment, and accessibility. The choice of attributes for each domain varied with the chosen mix of the seven tourism activities. Attributes such as variety of options, quality of products offered, quality of services provided, and product/service price were assessed for 'accommodation', 'dining', 'shopping', 'attractions', and 'activities & events'. For 'environment', features such as safety and security, cleanliness, atmosphere, and attitude of local people were evaluated; while for 'accessibility', elements such as ease of access, local transportation, parking, availability of travel information and welcome center were rated. To avoid potential problems associated with the gap approach (Cronin & Taylor, 1992; Brown et al., 1993), tourists were asked to evaluate their satisfaction directly with each tourist-attracting attribute, along a seven-point Likert-scale (1 = *very dissatisfied* and 7 = *very satisfied*).

2) *Tourists' Overall Satisfaction* Multiple-item scales were used to measure tourists' overall satisfaction, in which several individual variables were pooled into a single composite measure. Previous research findings demonstrate

that there is a significant relationship among overall satisfaction, intention to return and positive word-of-mouth communication (Crosby, 1993; Taylor & Baker, 1994). Satisfied tourists are more willing to recommend the destination to others, and satisfaction also contributes to customer retention and loyalty. Therefore, Rust, Zahorik & Keiningham (1996) suggested to measure overall satisfaction with the level of overall satisfaction, intention to repurchase, and intention to recommend. Furthermore, good correlations have also been found among the three items (Kozak & Rimmington, 2000; Ross 1993). In this study, three questions were used to determine tourists' overall satisfaction: 1) tourists' satisfaction with their overall traveling experience (7-point Likert scale with 1 being *very dissatisfied* and 7 being *very satisfied*); 2) tourists' intention to revisit Eureka Springs, and 3) their willingness to recommend the city as a favorable destination to others (7-point Likert scale with 1=*most unlikely* and 7=*most likely*).

Reliability

A pilot test was conducted to test the internal consistency of the questionnaire. The pilot sample size was determined using the confidence interval approach (details for this approach in 'sampling plan'): a sample with 80%

accuracy (20% error) at the 95% confidence level is calculated as $n = \frac{1.96^2(0.5*0.5)}{0.2^2} = 25$. The first draft of the survey

instrument was distributed to 50 randomly selected visitors who stayed at Eureka Springs' hotels and motels. A total of 33 completed surveys were returned. The results of the reliability analysis using Cronbach's alpha showed that the scale was internally reliable: alpha values of 0.918 for 'attribute satisfaction' (33 items) and 0.837 for 'overall satisfaction' (3 items) well exceeded the minimum standard of 0.7 suggested by Nunnally & Bernstein (1994).

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 was 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^{th} element after a random start.

Data Analysis

Descriptive statistics determined mean and standard deviation scores on attribute satisfaction and overall satisfaction. In addition, frequency distribution of travel behavior and visitor demographic information was analyzed. Exploratory factor analysis was employed to derive the underlying dimensions of visitors' satisfaction with a list of Eureka Spring's travel features and activities. Confirmatory factor analysis (CFA) was applied to confirm the factor structure developed from the exploratory factor analysis (EFA). Multiple regression analysis was employed to predict tourists' overall satisfaction based upon 'attribute satisfaction' dimensions developed from EFA and CFA.

RESULTS

Respondents' Travel & Demographic Profiles

A total of 345 questionnaires were returned which was about 90% of the targeted sample size. The majority (94%) of the respondents was 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%) were cited as the two key information sources for respondents to learn about Eureka Springs.

Exploratory Factor Analysis

In order to verify the pre-specified dimensions of tourists' satisfaction, a principle axis factoring using varimax rotation was undertaken. To determine whether the data were appropriate for common factor analysis, data set was examined to ensure that assumptions were met. The Barlett chi-square test was significant at .000, and the KMO-MSA overall value was 0.9, indicating that data were suitable for factor analysis. The criteria for the number of factors to be extracted were based on eigenvalues, percentage of variance, communality, and the significance of factor loadings. Seven factors with eigenvalues above 1.0 were generated, which explained about 73% of the total variance (see table 1). 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 0.45 to 0.84, above the

suggested threshold value of 0.35 for practical and statistical significance for sample size of 250 or greater (Hair et. al., 1998). The loadings also presented a clean and highly interpretable solution: the 33 variables loaded significantly on seven factors as the researcher conceptualized; and no variable 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 0.70 (Nunnally, 1979), indicating high internal consistency among the variables within each factor.

Table 1
Underlying Dimensions of Attribute Satisfaction

	Eigenvalue	Variance explained	Cronbach's	Factor Loadings	Communality	CR	AVE
F1 Dining	14.87	45.06%	0.87			0.90	0.64
Quality of food				0.78	0.77		
service				0.72	0.69		
Variety of cuisine				0.69	0.63		
Convenience				0.67	0.58		
price				0.63	0.62		
F2 Lodging	2.63	7.97%	0.90			0.88	0.54
uniqueness				0.84	0.82		
variety				0.77	0.72		
service				0.62	0.71		
Historic interests				0.60	0.50		
quality				0.55	0.64		
price				0.50	0.50		
F3 Accessibility	1.79	5.42%	0.91			0.86	0.55
Local transportation				0.70	0.69		
Local parking				0.68	0.56		
Travel information				0.67	0.73		
Welcome center				0.61	0.62		
Ease of access				0.59	0.56		
F4 Activities & Events	1.59	4.82%	0.86			0.86	0.54
Events & festivals				0.80	0.76		
Healing options				0.68	0.55		
Outdoor recreation				0.63	0.61		
Evening entertainment				0.61	0.53		
price				0.48	0.63		
F5 Attractions	1.14	3.45%	0.85			0.92	0.73
Historic sites				0.76	0.92		
Natural attractions				0.68	0.79		
Cultural options				0.60	0.72		
price				0.45	0.64		
F6 Environment	1.11	3.37%	0.89			0.89	0.71
atmosphere				0.68	0.75		
cleanliness				0.65	0.77		
people				0.62	0.70		
Safety & security				0.51	0.58		
F7 Shopping	1.08	3.26%	0.85			0.87	0.62
quality				0.69	0.82		
price				0.62	0.63		
variety				0.51	0.58		
service				0.50	0.61		

Factor one 'dining' consisted of five items related to tourists' dining experience: variety of cuisine, quality of food, convenience of meals, service in restaurants, and reasonable price of meals. It explained 42% of the variance in the data, with an eigenvalue of 13.9. Factor two 'lodging' composed of six items, all closely related to tourists' lodging experience: variety of lodging options, uniqueness of lodging, historical interest of lodging, quality & cleanliness of lodging facilities, service in lodging facilities, and reasonable price of accommodation. It accounted for about 7% of the total variance, with an eigenvalue of 2.4. Factor three 'shopping' was represented by four variables, depicting tourists' shopping experience:

variety of shops, quality of merchandise, friendliness of service, and reasonable price of merchandise. It explained approximately 6% of the variance, with an engenvalue of 1.9. Factor four 'activities & events' was converged by five items symbolizing the city's attractiveness in offering variety of outdoor recreation, healing options, evening entertainment, plus special events, and charging reasonable price for these activities & events. It represented about 4% of the total variance in the data, with an eigenvalue of 1.3. The five items formulating factor five 'attractions' introduced the city's variety of historic sites, natural attractions, cultural options, and reasonable price for sightseeing. It had an engenvalue of 1.6, accounting for around 5% of the total variance. Factor six 'environment' reflected respondents' feelings towards the travel environment; it included safety and security, cleanliness, peaceful atmosphere, and friendliness of local people. Approximately 4% of the variance was captured by factor six that had an eigen value of 1.2. Factor seven 'accessibility' described the accessibility of the city, including ease of access, convenience of local transportation, availability of local parking, availability of travel information, and helpfulness of welcome center. It reflected around 3% of the total variance with an engen value of 1.1.

Confirmatory Factor Analysis

Exploratory factor analysis is primarily an exploratory technique due to its lack of formal statistical tests and its many arbitrary decision rules. Confirmatory factor analysis, however, can play a confirmatory role because it allows for statistical tests for the model and provides a more formal approach to examining theory-based prediction of dimensional structure (Hair et.al., 1998). Based on the previous exploratory factor analysis, the confirmatory factor model posited seven factors or latent constructs with each set of the variables acting as indicators of the separate constructs. Various measures of overall model goodness-of-fit and measurement model assessments suggested an acceptable model of the hypothesized constructs, particularly considering the attenuation in the fit measures for large models and large sample sizes. These lent supports for the proposed seven-factor model of tourists' attribute satisfaction.

Overall Model Fit

Overall model fit depicts the degree to which the specified indicators represent the hypothesized constructs. The χ^2 value (1,293.5 with 474 degrees of freedom) has a statistical significance level of 0.000. This statistic failed to support that the differences of the predicted and actual models are 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, departures from multivariate normality, 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, such as the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), and the Normed Fit Index (NFI), which were 0.981, 0.977, and 0.968 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). The RMSEA value of 0.066 fell within the recommended level of 0.08 or less for a reasonable error of approximation (Browne and Cudeck, 1993).

Measurement Model Fit

With the overall model being accepted, each of the constructs can be evaluated separately. 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. Next, estimates of the reliability and variance-extracted measures for each construct were assessed to see if the specified indicators were sufficient in their representation of the constructs (see table 1). The composite reliabilities ranged from 0.86 to 0.92, exceeding the suggested level of 0.70. The results supported the convergent validity of the items in each scale. The AVE values ranged from 0.54 to 0.73, all exceeding the minimum cutoff of 0.50. This suggested that the seven constructs explained a good amount of variance in their respective indicators taken together.

Multiple Regression Analysis

To predict tourists' overall satisfaction based on their satisfaction with different tourism attributes and identify the relative importance of the factors that led to higher satisfaction, a multiple regression analysis was attempted with the overall satisfaction composite measure (3 items) as the dependent variable and the seven attribute satisfaction factors as the independent variables. Orthogonal factor scores for the seven dimensions were used because they help avoid potential multi-collinearity effect. A stepwise regression approach was undertaken because it provides an objective way to choose variables that maximize the prediction while maintaining a parsimonious model (Hair et. al., 1998). The F-ratio of 11.364 was significant ($p \leq .000$), suggesting that the regression of the dependent variable on the independent variables taken together was statistically significant. The correlation coefficient ($R = 0.484$) reflected the degree of association between independent variables and dependent variable. The coefficient of determination was .234, indicating that the model predicted about 23.4% of the variation in tourists' overall satisfaction ratings. The adjusted R^2 was 0.213 (as compared with

an R^2 of 0.234), suggesting that the estimated model was not over-fitted to the sample and maintained an adequate ratio of observations to variables in the variate (see table 2).

The significance tests were used to examine the impact of the independent variables on the dependent variable. Five variables emerged as significant at 0.05 and were thus retained in the regression model: lodging, attractions, environment, dining, and activities & events. The final regression model was as follows: $Y = 6.279 + .236 X_1 + .213 X_2 + .175 X_3 + .159 X_4 + .15 X_5 + e$, Where, Y = tourists' overall satisfaction, X_1 = lodging, X_2 = attractions, X_3 = environment, X_4 = dining, X_5 = activities & events, e = random error. The results revealed that tourists' overall satisfaction depended on their satisfaction with five underlying factors: lodging, attractions, environment, dining, and activities & events. Given the significant independent variables in the model, 'shopping' and 'accessibility' did not significantly add to the predictive power of the regression model. It can be concluded that a positive relationship existed between the five 'attribute satisfaction' dimensions and tourists' overall satisfaction; the more favorable tourists were with the five factors, the higher their overall satisfaction level would be and the more willing they were to revisit and spread positive WOM of the city. The regression coefficients were used to assess the relative importance of each individual dimension in the overall prediction. The dimension with the heaviest weight in predicting overall satisfaction was 'lodging' ($\beta = .332$), followed by 'attraction' ($\beta = .183$), environment ($\beta = .167$), dining ($\beta = .137$), and activities & events ($\beta = .131$). This indicated that 'lodging' might be the most important predictor of tourists' overall satisfaction with 'activities & events' being the least.

Table 2
Antecedents of Tourists' Satisfaction

	R	R^2	Adjusted R^2	$F_{(5, 186)}$	Sig.		
	.484	.234	.213	11.364	.000		
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	6.258	.063		98.611	.000		
lodging	.363	.071	.332	5.140	.000	.989	1.011
attractions	.196	.069	.183	2.833	.005	.991	1.009
environment	.188	.073	.167	2.588	.010	.985	1.015
dining	.147	.069	.137	2.127	.035	.992	1.008
activities& events	.142	.070	.131	2.033	.044	.996	1.004
shopping			.119	1.857	.065	.991	1.009
accessibility			.098	1.532	.127	.992	1.008

CONCLUSION AND IMPICTATION

The purpose of the study was to discover latent factors that influenced tourists' overall satisfaction. Based on a comprehensive review of customer satisfaction literature both in general marketing and tourism marketing, seven factors were identified that might have an effect on tourists' overall satisfaction with their traveling experience. The measurement scale including 33 'attribute satisfaction' variables was developed from reviewing academic and trade press literature, promotion brochures and websites for Eureka Springs, and employing qualitative research techniques such as focus group sessions, unstructured personal interviews and managerial judgments. The measurement scale was tested using exploratory factor analysis with varimax rotation, and then validated using confirmatory factor analysis. The results indicated high validity and reliability of the scale. Both EFA and CFA supported a seven-factor model as conceptualized a priori by the researcher: lodging, dining, shopping, attractions, activities & events, environment, and accessibility were seven underlying dimensions of the construct 'attribute satisfaction'. These seven factors were then regressed against overall satisfaction in a subsequent multiple regression analysis, in an attempt to determine the relative impact of each individual factor on tourists' overall satisfaction. The results revealed that five factors had significant positive effects on tourists' overall satisfaction: 'lodging', 'attractions', 'environment', 'dining' and 'activities & events', suggesting that the happier tourists were with the five dimensions, the more satisfied they were with their overall traveling experience, and the more likely they would return and recommend the city to others; while no direct relationship were found between overall satisfaction and 'accessibility' and 'shopping'. In the context of this study, 'lodging' contributed the most to the prediction of tourists' overall satisfaction, followed by 'attraction', 'environment', 'dining', and 'activities & events'.

This study attempted to contribute to the tourism literature in the relatively less explored area of the relationship between attribute satisfaction and overall satisfaction. A positive relationship was established between attribute satisfaction and overall satisfaction, as indicated by the positive signs of regression coefficients of the five factors. This confirmed previous research findings in the general marketing literature (Oliver, 1993; Spreng et. al. 1996), in which attribute satisfaction was found to have positive and direct effects in overall satisfaction. In addition, the rigorously developed and

tested 'attribute satisfaction' scale from this study could be used by future tourism researchers to advance more studies in this area. Before discussing practical implications of the research findings, limitations of the study were described first so that readers can interpret the implications with caution.

Limitations and Recommendations

The following limitations were inherent in the study. First, the study was conducted in the summer, and thus findings were limited to summer travelers. Tourists who travel in different seasons may form different opinions of a destination (Murphy & Pritchard, 1997). Seasonality restricts the generalizability of tourism research findings, and should always be taken into consideration in the interpretation stage. 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. Second, the population of this study was limited to visitors of a tourist destination in the Midwest. 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. In addition, the response rate in this study (36%) was relatively low as compared to other on-site tourist survey; this might lead to non response bias, introduced due to the under-representation of those non-respondents in the population. It was possible that only tourists who harbored favorable feelings of the city responded to the survey, whereas those unhappy tourists chose not to fill out the survey. This may result in an upward bias in responses. Therefore, the conclusions drawn from the study regarding the population of interest should be used within the context of the limitations. Third, the relatively low R^2 (23.4%) of the satisfaction model in this study may indicate that there are additional factors influencing tourists' overall satisfaction. This study only studied 'attribute satisfaction' as an antecedent to overall satisfaction. As Spreng et. al. (1996) pointed out that attribute-specific satisfaction is not the only antecedent of overall satisfaction; future researchers should investigate additional antecedents that might help better explain tourist satisfaction. For instance, destination image was often suggested by tourism scholars as a crucial factor in formation of tourist satisfaction (Font, 1997; Bigne, Sanchez, & Sanchez, 2001).

Practical Implications

Results of the study indicated that Eureka Springs had served the tourist market well. The mean scores of overall satisfaction (6.25), revisit intention (6.07), and referral intention (6.33) indicated that tourists were satisfied with their traveling experience in general, were interested to visit the destination again, and intended to refer the destination to friends and relatives. In addition, they were largely satisfied with different attribute dimensions (mean ranging from 5.2 to 6.4). Of the seven attribute satisfaction factors, 'environment' (mean 6.35), 'lodging' (mean 5.98) and 'dining' (mean 5.8) emerged as the most satisfied factors and were also important predictors of tourists' overall satisfaction. The environment, be it natural or artificial, is the most fundamental ingredient of the tourism product. A poorly-maintained travel environment could surely decrease travelers' satisfaction and damage a community's image. The accommodation and dining components of the destination not only provide physical shelter and sustenance, but also create the general feeling of welcome and a lasting impression of the local cuisine and produce (Cooper et. al. 1998). Thus, the overall quality of accommodation and dining services are critical elements affecting tourists' satisfaction and their future behavior. Tourists held highly positive perceptions of Eureka Spring's travel environment, its lodging and dining establishments. Local tourism marketers are advised to focus on these aspects in their promotional efforts of Eureka Springs in order to capitalize on their assets.

'Attractions' was the second most important determinant of overall satisfaction; however, tourists were only moderately satisfied with this factor (mean 5.6). Similarly, 'activities & events' contributed significantly to the prediction of overall satisfaction; however, it was the least satisfied factor (mean 5.19). Tourists' attractions including natural and cultural sites provide the single most important reason for leisure tourism to a destination. Events including sports activities and cultural events can be complementary activities and are frequently used to enhance the appeal and the image of a destination (Cooper et. al. 1998). These factors shape tourists' experiences and evaluations, and can make or break a destination's tourist industry. Therefore, local tourism marketers should focus on promoting the city's attractions and events so as to improve tourists' satisfaction with these factors. 'Accessibility' (mean 5.58) and 'shopping' (mean 5.67) had moderate satisfaction ratings and were not significant contributors to explaining tourists' overall satisfaction. This may indicate that these factors were low priority items in tourists' mind (Cadotte & Turgeon, 1988). These attributes are easily satisfied but may not be salient to customers. Good performance on these factors may be a plus to tourists' traveling experience, but moderate performance would not cause major complaints. Consequently, given limited resources, tourism marketers would probably have to favor other more critical satisfaction factors in improvement and promotional efforts. Having said this, it should be noted that their roles in sustaining tourists' satisfaction should not be ignored altogether. For example, efficient physical and market access to a destination are one of the most important pre-requisites for the development of any destination (Cooper et. al. 1998). For some categories of tourists, transport is part of leisure and the journey is at least as important as the destination itself.

In conclusion, findings from this study corroborated that when tourists were satisfied with the main aspects of their

trip, such as lodging experience, dining experience, and sightseeing experience, their needs and wants for the trip were essentially fulfilled. Therefore tourism destination marketers should invest the most efforts and resources in promoting and improving performance on these factors in order to increase tourists' satisfaction and ultimately gain customer loyalty and boost economic returns. It is hoped that these findings will be valuable to tourism organizations and businesses in Eureka Springs in evaluating their existing performance and designing future management and marketing strategies.

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EMPLOYEE RELATIONS AND YOUR BOTTOM LINE: IMPACT ON TURNOVER, LABOR PRODUCTIVITY,
AND REVPAR

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ABSTRACT

The purpose of this study was to examine the impact of employee relations programs (ERP) on organizational performance. ERP provides employees with opportunities to participate in planning and improving work related tasks. Four items were used to measure employee relations: formal complaint-resolution programs, participation programs, attitude surveys, and suggestion systems. In addition, three types of organizational performance measures were used: employee turnover, labor productivity, and revenue per available room. Findings indicated that the participation programs satisfy employees' self-esteem needs by providing intrinsic rewards. Furthermore, the study demonstrated that ERP based satisfaction leads to higher labor productivity and RevPAR.

Key Words: Employee Relations, Turnover, Labor Productivity, RevPAR

INTRODUCTION

As human resources management (HRM) is increasingly being realized as an important tool to create and maintain competitive advantage (Wright, McMahan, & McWilliams, 1994), it was reported that one third of human resource managers believed that employee relationship problems are their top concerns ("Human Resource," 2000). While other HRM practices such as selection, training, and compensation have received much attention from professionals and academicians, the relationship between employee relations and a company's performance has not been thoroughly investigated. Employee relations refer to systematical organizational governance that provides fair and consistent treatment of employees (Gomez-Mejia et al., 2001). Good employee relations provide employees with opportunities to voice their reactions to management decisions and policies (Gomez-Mejia et al., 2001), leading to motivated, loyal, and high performing employees (Daniel, 2003). Highly motivated and loyal employees are highly productive workers (Judge, Bono, Thoresen, & Patton, 2001; Kluger & Tikochinsky, 2001), consequently contributing to greater organizational performance. Given the aforementioned discussions on employee relations, this study examines the validity of the advocated argument that good employee relations influence organizational performance in the lodging industry.

Based on a literature review on employee relations, three research questions are outlined as follows.

1. Employee relation programs has an influence on decreases in turnover rate;
2. Employee relation programs have an effect on increases in labor productivity; and,
3. Employee relation programs have a positive relationship with revenue per available room.

METHODOLOGY

Although there were only a few studies (Cooke, 1994; Marks et al., 1986; Voos, 1987) that examined the direct effects of employee relations programs on a firm's performance, some studies included several different employee relations programs within the overall HRM system. The examples of the employee relation programs include policies to break status barriers, participation programs, decentralized decision making, attitude surveys, complaint-resolution procedures, employment security, etc. The literature review revealed that four programs were most commonly chosen to measure employee relations. They are: complaint-resolution programs (Becker & Huselid, 1998; Datta et al., 2003; Delaney & Huselid, 1996; Huselid, 1995; Moynihan et al., 2001), participation programs (Arthur, 1994; Becker & Huselid, 1998; Datta et al., 2003), suggestion programs (Delery & Doty, 1996), and attitude surveys (Becker & Huselid, 1998; Datta et al., 2003). Therefore, four questions were developed in this study based on the aforementioned literature review.

Respondents were asked to rate each of the following four statements on a scale of 1 (*very inaccurate*) to 6 (*very accurate*).

- Employees have a reasonable and fair complaint-resolution process.
- Employees are involved in formal participation processes such as quality improvement groups, problem solving groups, or suggestion systems.
- Employees are provided the opportunity to suggest improvements in the way things are done.
- Employees regularly (at least once a year) complete an attitude survey.

In addition, four questions were measured separately in two groups - managerial and non-managerial employee groups. As Bamberger and Meshoulam (2000) pointed out, measuring HRM practices at different levels within an organization (e.g., line employees, managers, executives) and between organizations (e.g., workgroups, properties, business units, and corporation) is likely to yield different results. Delery (1998) argued, assuming that the use of practices across an organization would be the same for all levels of employees is probably a false supposition. He stated that such an assumption argues that all employees across the organization are equally important. Given this suggestion, this study attempted to reconcile the limitation that existed in the previous studies by measuring HRM practices at two different levels: managerial and non-managerial employees. The data was analyzed separately for the two groups.

Organizational performance, affected by employee relation programs, was measured in three categories: human resource outcomes; organizational outcomes; and, financial accounting outcomes. Dyer and Reeves' (1995) four categories were utilized with the exception of capital-market outcomes because the population of this study was hospitality business units which did not provide figures that reflect capital market evaluation. Dyer and Reeves (1995) suggested four types of organizational performance measures: 1) human resource outcomes; 2) organizational outcomes; 3) financial accounting outcomes; and, 4) capital market outcomes. The category of human resource outcomes relates to changes in employees' behavior. It includes turnover rates, absentee rate, and employee satisfaction. Organizational outcomes contain labor productivity, customer satisfaction, and quality of products and services. Financial accounting outcomes include three measures: return on assets, return on equity, and profitability. Capital market outcomes reflect how market evaluates an organization. Capital market outcomes consist of three indicators: stock price, stock price growth rate, and market returns.

Turnover was used to measure human resource outcomes. Respondents were asked to provide voluntary turnover rates for managerial employees and non-managerial employees in percentages. Other recommended measures such as employee satisfaction were not included because of inconsistent scales across the participating companies. Labor productivity was used to measure organizational outcomes. Labor productivity refers to organizational efficiency in achieving organizational goals (Fosler, 1978), thus labor productivity represents an organization's efficiency in maximizing its revenue with a limited number of its employees. Respondents were asked to provide figures for total revenue and the number of employees. Labor productivity was measured by dividing total revenue by the number of employees.

Revenue per available room (RevPAR) was used for financial accounting outcomes. RevPAR is the most widely used measure for hotel productivity (Brown & Dev, 1999). RevPAR is a balance measure between low occupancy/high rate and low rate/high occupancy rate (Aronson & Barkoff, 2004). It is a product of average daily room rate and average occupancy rate. Respondents were asked to provide their average daily room rate and average occupancy rate.

A self-administered questionnaire was sent to individuals on the list of certified hotel administrators and certified human resources executives by the American Hotel and Lodging Educational Institute. There were a total of 824 individuals after excluding those working abroad and at corporate lodging companies. The corporate lodging companies were excluded because the target population of this study was lodging companies at the business unit level. The self-administered survey was used to collect the necessary data. To increase response rate, the repeated-contact method was used (Fowler, 2002). About 10 days after the initial mailing, a thank-you card was mailed with a reminder note for those who had not yet responded. About 10 days after mailing the thank-you card, another reminder, survey, and a self-addressed envelope were mailed. A total of 147 responses were returned, including 41 returned for wrong addresses. The usable response rate after accounting for wrong addresses and such was 14.36%. A total of 106 responses were used for further analyses.

RESULTS

Multiple regression analyses were conducted to examine whether the employee relations programs positively affected turnover rates, labor productivity, or RevPAR. Two sets of multiple regression analyses were conducted for managerial and non-managerial employee groups. The results of the analyses are shown in Table 1 and Table 2.

Table 1 shows the results of three multiple regression analyses for the group of managerial employees. Coefficient of determination was found to be significantly different from zero for all three dependent variables, turnover rate ($R^2 = .15$, $p < .05$, $F_{6,90} = 2.56$), labor productivity ($R^2 = .43$, $p < .001$, $F_{6,90} = 11.16$), and RevPAR ($R^2 = .23$, $p < .001$, $F_{6,90} = 4.57$). Suggestion program was the only employee relations program that significantly predicted turnover rate for managerial employee group ($\beta = -.46$). This indicates that companies that are one standard deviation higher than the average suggestion program are estimated to be 0.46 lower on turnover rate. In other words, if a company provides more opportunities for employees to suggest improvements, managerial employees are less likely to leave the company.

Table 1
Results for the Managerial Employee Group

Variables	Turnover rate		Log labor productivity		Log RevPAR	
	β	t value	β	t value	β	t value
Employees	-.01	-.06***	-.56	-6.13***	.40	3.81***
Rooms	-.03	-.26***	-.13	-1.55***	-.15	-1.49***
Complaint-resolution process	.09	.74***	-.13	-1.33***	-.05	-.43***
Formal participation program	.13	1.01***	.20	1.96***	.26	2.27***
Attitude survey	.00	-.03***	-.06	-.64***	.05	.51***
Suggestion program	-.46	-3.72***	-.14	-1.37***	-.17	-1.45***
R^2	.15*		.43***		.23***	

* $p < .05$, *** $p < .001$

Formal participation program was the only employee relations program that significantly affected labor productivity ($\beta = .20$). This means that if a company implements formal participation programs to a higher number of managerial employees, the company is more likely to experience greater labor productivity. In addition, this result shows that companies that are one standard deviation higher than the average on formal participation program are estimated to be 0.20 higher on logged labor productivity.

Formal participation program also affected RevPAR ($\beta = .26$). Companies that are one standard deviation higher on formal participation program are estimated to be 0.26 higher on logged revenue per available room. To simply put it, this result suggests that a company's RevPAR will be increased if the company gets more managers involved with the participation programs.

Table 2
Results for the Non-managerial Employee Group

Variables	Turnover rate		Log labor productivity		Log RevPAR	
	β	t value	β	t value	β	t value
Employees	.03	.23	-.56	-6.16***	.41	3.85***
Rooms	.06	.57	-.13	-1.55***	-.14	-1.39***
Compliant-resolution process	.04	.32	-.18	-1.13***	-.03	-.26***
Formal participation program	-.16	-1.29	.17	1.78***	.22	1.96***
Attitude survey	.10	.84	-.06	-.72***	.02	.21***
Suggestion program	-.15	-1.15	-.15	-1.48***	-.14	-1.21***
R^2	.05		.43***		.26***	

* $p < .05$, *** $p < .001$

Three more multiple regression analyses were conducted to examine the relationship between employee relations programs and the measures of organizational performance for the group of non-managerial employees as shown in Table 2. Coefficient of determination of turnover rate was not significantly different from zero ($R^2 = .05$, $p = .57$, $F_{6,90} = .81$). However, for labor productivity and RevPAR, the coefficients of determination were significantly different from zero; $R^2 = .43$, $p < .001$, $F_{6,90} = 11.42$ and $R^2 = .23$, $p < .001$, $F_{6,90} = 4.34$, respectively. All four employee-relations programs did not have significant effects on turnover rate and labor productivity. However, a significant and positive relationship was found between formal participation programs and RevPAR ($\beta = .22$). This indicates that if a company has more non-managerial employees involved in formal participation programs, the company will experience higher RevPAR.

CONCLUSIONS AND IMPLICATIONS

This study investigated the effects of employee relations programs on organizational performance. Four employee relations programs and three measures of organizational performance were used. Following the suggested challenges (Bamberger & Meshoulam, 2000; Delery, 1998) the employee relations programs were separately measured for two groups, managerial and non-managerial employees, then regressed on turnover rates, labor productivity, and RevPAR.

As shown in Table 1 and Table 2, the results were different for managerial and non-managerial employee groups. For the managerial employee group, suggestion program significantly predicted turnover rate for managers while it did not affect turnover rate of non-managerial employees. The same outcome was obtained in labor productivity; formal participation program had a positive relationship with labor productivity for the managerial employee group, but not with the non-managerial employee group. However, formal participation program was found to be positively related to RevPAR for both groups.

The opportunity described as employee voice was indeed a source of turnover for the managerial employee group included in this study. Spencer (1986) found that if employees lack an opportunity to voice their suggestions, they are likely to leave their companies. Employees feel more satisfied and valued when they see their suggestions are given consideration and applied at the workplace. The finding of this study confirms that employees are less likely to leave their companies when they have more opportunities to place suggestions. Even though the formal participation program did not affect turnover, the program implemented with managerial employees was positively related to increased labor productivity and RevPAR. This finding indicates that the participation programs satisfy employees' self-esteem needs by providing intrinsic rewards. Furthermore, the satisfaction leads to higher labor productivity and RevPAR.

Even though the maximization of coefficient of determination (R^2) expressing the level of prediction accuracy was not the purpose of the multiple regression analyses (Schroeder, Sjoquist, & Stephan, 1986), it should be pointed out that the low R^2 for turnover rate and RevPAR may suggest that there are other factors influencing both organizational performance measures. As the existing literature demonstrates, job satisfaction theory has dominated the search for sources of employee turnover. Studies have shown that turnover is negatively related to pay (Shaw, Delery, Jenkins, & Gupta, 1998), job satisfaction (McBey & Karakowsky, 2000), job dissatisfaction (Hom & Kinicki, 2001), and job embeddedness (Mitchell et al., 2001). Shaw et al. (1998) found average pay was the strongest variable among ten HRM practices that affect employees' turnover. The abovementioned factors may explain more variances for the causes of turnover. It is difficult to compare the findings of this study with related others since there are few studies investigating direct causes of increases or decreases in RevPAR. However, there are many factors that influence a firm's RevPAR as an indicator of financial accounting outcomes. The factors could be from the external business environment such as financial markets and economic conditions or from the internal work environment like effective training programs, succession plans, incentive plans, etc. Further investigation of these factors' effects on a firm's performance promises to be a great contribution for both the industry and academia.

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NUTRITION INFORMATION AT POINT OF SELECTION AFFECTS FOOD CHOSEN BY HIGH SCHOOL STUDENTS

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ABSTRACT

The objective of this study was to determine whether high school students would change their food choices based solely on the availability of nutrition information posted at the point of selection (POS). Four school foodservice directors from rural, suburban, and urban districts participated in the study. Food production or sales data were collected before and during the intervention for comparison using a one-way within subjects analysis of variance (ANOVA). Students in grades 9-12 from six schools were involved in the study. Supplying nutrition information seemed to influence food selection as student choices of more healthful entrees increased. Differences were slight to moderate. Students seemed to be most affected in their decision-making by number of calories and fat grams.

INTRODUCTION

Overweight among U.S. adolescents is a major public health concern. Current data from NHANES (1999-2000) show that the prevalence of overweight among 12 to 19-year-olds has increased to 15% (American Academy of Pediatrics, 2003; Ogden, Flegal, Carroll, & Johnson, 2002). The incidence of overweight in this population has increased almost 200 percent in the last twenty years (American Obesity Association, 2003).

The level of obesity in adolescents is important because the consequences of overweight and obesity lead to increased health risks that may last a lifetime (Reilly et al., 2003). Overweight young adults are two to three times more likely to have high total cholesterol levels, and over 43 times more likely to have cardiovascular disease risk factors such as elevated blood pressure. They have a higher prevalence of glucose intolerance and Type 2 diabetes (Invitti, Guzzaloni, Gilardini, Morabito, & Viberti, 2003). Obesity in adolescents is the leading predictor of obesity in adulthood (Engeland, Bjorge, Tverdal, & Sogaard, 2004; Kvaavik, Tell, & Klepp, 2003). Previous studies have shown that eating behaviors such as increased fast food consumption (Thompson et al., 2004), increased portion sizes, and increased snacking may explain the increase in overweight and obese young adults (Nicklas, Baranowski, Cullen, & Berenson, 2001).

Diet quality is also a major concern for adolescents. In the past decade, only 1% of youth met all the food consumption guidelines addressed in the U.S. Food Guide Pyramid (Munoz, Krebs-Smith, Ballard-Barbash, & Cleveland, 1997). Kant (2003) found that 30% of the daily calories American adolescents consume come from foods of modest nutritional value, with sweeteners and desserts accounting for nearly 25% of this amount. Nicklas and colleagues (2004) analyzed children's meal patterns over two decades and found no association between meal patterns and overweight status. Strategies to change eating behaviors, therefore, should match nutrition intervention with adolescents on the basis of motivational factors (Storey, Neumark-Sztainer, & French, 2002).

Three food and nutrition professional associations have strongly advocated that nutrition services, including nutrition education, be provided to all of the nation's children through grade 12 (Position of the American Dietetic Association, 2003). Recent child nutrition legislation mirrors this view (Committee on Education and the Workforce, 2004). School nutrition programs are not the only answer to improving children's weight and eating habits, but these programs interface with most students five days out of seven.

The literature is replete with studies on school-based nutrition programs for adolescents, such as CATCH, TEENS, and TACOS (Hoelscher, et al., 2004; Lytle et al., 1996; Lytle & Fulkerson, 2002). However sound data on the effectiveness of nutrition education programs are still needed (Contento, Randell, & Basch, 2002). Research by the Centers for Disease Control and Prevention (2000) found that adolescents know what foods are healthful; they just do not choose

them for a variety of reasons. Alternate strategies to classroom education programs have focused on changing eating behaviors by altering the school food environment, such as lowering the fat content of food sold, raising prices of less healthful snack items, and increasing physical activity during the day (French, Jeffrey, Story, Hannan, & Snyder, 1997; Jacobson, & Brownell, 2000; Luepker et al., 1996; Zive, Pelletier, Sallis, & Elder, 2002).

The Obesity Working Group of the U.S. Food and Drug Administration recommended that nutrient information be made more readily available at point of sale to enhance customers' ability to make wise food choices (U.S. Food and Drug Administration, 2004). When exposed to information about reading nutrition labels on packaged food, students had favorable attitudes toward the labels and an increased use of labels in making food choices (Marietta, Welshimer, & Anderson, 1999). Other researchers found mixed results in promoting changes in customers' food selections by providing nutrition information at point of selection in cafeteria settings (Anderson, & Haas, 1990; Kubena & Carson, 1988; Larson-Brown, 1994; Schmitz & Fielding, 1986).

The objective of this study was to determine whether high school students would change their food choices based solely on the availability of nutrition labels posted at the point of selection (POS). Focus groups conducted with high school students to explore their perceptions of an ideal school foodservice program found that the availability of nutrition information was desired, especially information on calorie and fat content of menu items (Meyer, 2002; Meyer & Conklin, 1998). This research explored whether students, given this information, would then act positively.

METHODOLOGY

Study Population

The study involved students eating in high school cafeterias in Pennsylvania. School foodservice directors (FSD) within a three-hour driving radius of the researchers were solicited for participation in the study through electronic mail. Researchers were purposeful in asking FSD from districts that offered a variety of services to students in rural, suburban, and urban areas. Some districts had very traditional straight-line cafeterias with almost all entrees planned to meet the reimbursable meal pattern, while others offered many a la carte options, in addition to the reimbursable meal, within a scramble system. Out of 10 directors who received e-mails, four provided useable data for the study. Two of the participating districts had two high schools. For these districts, one high school was designated a control school with no intervention provided, and the other school received the intervention.

Procedures

The University institutional review board approved data collection procedures. During the first six weeks of school in Fall 2003, the school foodservice program at each school was conducted as "normal." Food production or sales records (school FSD records maintained in the district) were kept during this same six-week period to establish a baseline for food item selection. In all schools, the baseline period covered one complete menu cycle.

For the next six-week period or the second time through the menu cycle, school districts posted point of selection (POS) nutrition information for each entrée item. For sandwich, potato, or pasta bars, the nutrient content of "typical" sandwiches and dishes were posted for comparative purposes.

If school FSD had nutrition information from CN labels or nutrient analysis software, this information was used. For others, researchers calculated nutrition information using Nutri-Kids software (LunchByte Systems, 2003). The Nutrition Facts Label, designed by the U.S. Food and Drug Administration, was used as the presentation format for nutrition information, because it is required on all packaged food products and possibly was familiar to students. A label template similar to the shortened version of the Nutrition Facts Label was developed using a word processing package. Labels included serving size, calories per serving, total fat, saturated fat, cholesterol, sodium, total carbohydrate, dietary fiber, protein, vitamins A and C, calcium, and iron. A disclaimer about the accuracy of the information also appeared in smaller print at the bottom of each label.

Only entrees were labeled for this study because they are the major source of fat, saturated fat, and calories in the school nutrition program and the central focus of what students choose for lunch. Additionally, researchers did not want to slow the speed of service, which would have occurred if all menu items were labeled. The school FSD worked with the research team to establish a set location for posting the information within the cafeteria service area to ensure high visibility. Menus, service style, and pricing in all districts were the same as the first six-week period, and cooks were not asked to change recipes to make the entrees more "healthful." The school foodservice directors instructed foodservice employees to function as usual, not to call attention to the labels, or promote one food item over another. Food production or sales records were collected at the end of the six-week intervention period.

Data Analysis

Pre and post data from food production records or sales data were analyzed using a one-way within subjects analysis of variance (ANOVA), using the $MS_{(error)}$ from the overall analysis of variance table. Multiple regression also was used. Each school district was analyzed separately.

RESULTS AND DISCUSSION

Participants

Four school foodservice directors in Central and Eastern Pennsylvania completed the study. Students in six high schools were involved in the study with two high school cafeterias in two districts. The schools were located in rural and suburban towns and a mid-size city. Each school district's ethnic make-up ranged from predominately Caucasian in the rural and suburban districts to predominantly Latin- and African-American in the mid-size city. The percent of free and reduced-price meals served varied from 4 to 72%. Daily revenue from a la carte sales ranged from \$200 to \$1,965. The number of entrees offered each day varied from 4 to 14, and the service styles ranged from three straight cafeteria lines to a scramble concept with ten serving lines.

Changes in Food Selections

Supplying nutrition information seemed to influence food selection as student choices of more healthful entrees increased. This difference was slight to moderate. Students did not change their eating behaviors by switching from pepperoni pizza and cheeseburgers to salad, but they did pick foods with less fat and fewer calories. For example, in each of the intervention schools, the number of servings of pepperoni pizza dropped significantly ($p < .05$), and the number of cheese pizza servings increased significantly ($p < .05$). Cheeseburgers and bacon cheeseburgers decreased while sales of hamburgers and veggie burgers increased significantly (all at least $p < .05$). These same items did not show significant changes in the control schools. These selections were offered on a daily basis in most schools, showing a choice trade off. Since these same items did not show significant changes in the control schools, this may indicate that students were using the nutrition information to compare labeled items, and the information influenced them to choose the entree lower in fat and calories. In fact, analysis of control schools' data revealed that most entree items showed a slight but insignificant decrease in selection, possibly due to boredom. However, the intervention schools showed a significant increase for items lower in fat and calories, and a significant decrease in those items higher in fat and calories. This would attest to the power of nutrition information in that there were increases in more healthful selections even in the face of a possible downward trend due to boredom.

This trend toward more healthful food selections was evident elsewhere. For example, in School 5 the preference for chicken entrees was higher, in general, but not all entrees showed this trend. In fact, the selection of some chicken entrees was significantly lower ($p < .05$). This difference seemed to be based on the number of fat grams. All chicken dishes that contained at least 20 grams of fat per serving (chicken nuggets, popcorn chicken, and chicken quesadillas) were selected significantly less often after nutrition information was displayed. Chicken items containing less than 20 grams of fat seemed to be selected based on a second criterion: calories. For example, chicken items with 18 grams of fat and more than 500 calories (chicken stromboli and chicken fajitas) were selected significantly less often. Chicken entrees with comparable fat content but fewer calories (oven baked chicken and chicken kabobs) were chosen significantly more often ($p < .05$). When the number of fat grams was well below 20 grams (12 or less), the number of calories appeared to be of minor importance in food selection. Both sweet and sour chicken (11 grams of fat and 650 calories) and roasted chicken salad (11 grams of fat and 269 calories) were selected significantly more often ($p < .05$ and $< .01$, respectively). At least one chicken entree was offered each day (6 weeks – 30 days for two cycles), which could be used as a choice tradeoff with the other entrée items offered on a given day. The number of entrée choices for each school is listed in.

Regression analysis showed that other criteria, such as fiber, vitamin A, vitamin C, iron, and sodium had no significant effect on food selection (all p -values $> .25$). Although the number of grams of carbohydrate and protein, and the amount of cholesterol were not significantly related (all p -values $> .05$) to food selection, the popularity of Atkins and South Beach Diets could change this in the future.

Nutrition information at POS may be influential because students are making the decision on what to eat. In fact, telling young adults that something is healthful may actually have the opposite of the intended effect. Young adults resist being "told" anything. They desire independence and want to decide for themselves if something is healthful. Based on their studies, Pawelko and Magafas (1997, p. 29) stated, "Adolescence is a time for individuals to test themselves and the world around them." Suls's (1989) discussion on self-identity and self-awareness in young adults emphasized the significant role that self-identity development plays as the center for all other youthful decision-making.

Based on research findings that have demonstrated the important connections between self-determination, choice, perceived control, independence, and freedom (Coleman & Iso-Ahola, 1993; Deci & Ryan, 1987; Langer & Rodin, 1976), it would seem prudent to provide the means for young adults to determine for themselves what is healthful. Providing nutrition information at POS may facilitate empowerment and self-determination in the decision making process (Lawler, 1992; Spritzer, 1996). Research by Cranage, Conklin and Bordi (2003) showed that informed choice (choice supplied with nutrient information) increased satisfaction with, and increased the likelihood of college students purchasing healthier snack bars. Nutrition information for entrees was posted in a cafeteria setting on a university campus in another study. With the same menu, participants rated their eating experience higher when nutrition information was provided, and it appeared that food selections changed during this time, not only with entrees, but with side dishes and desserts as well (Cranage, Conklin, & Lambert, 2004).

CONCLUSIONS AND APPLICATIONS

This study found that POS nutrition information was associated with the selection of more healthful foods by students eating in six high school cafeterias. Calorie and fat levels in entrees appeared to be especially persuasive. Congress exempted restaurants and other foodservice establishments when it passed the Nutrition Labeling and Education Act in 1990 (Nutrition Labeling and Education Act, 1990), but the national concern about obesity has caused legislators at all levels of government to question the wisdom of this exemption. Congress has been considering a bill that would require nutrition labels in restaurants with 20 or more outlets (Martin, 2003). Emphasis on providing nutrition information may become even more intense in public schools where children and adolescents form eating habits to last a lifetime. These findings indicate that at least some nutrition information at POS affected food selections of high school students. If school FSD have limited space to display nutrition information, they could at least supply information on fat and calorie content.

Nutrition information is used in most districts to meet the Healthy School Meals Initiative; potentially this same information could be made available at POS with very little additional cost. School FSD can use results of this study to evaluate the cost-effectiveness of fostering informed choice by changing the food environment at the serving line. Information on the nutrient content of food posted right where students make their food selections seems to be a subtle yet persuasive form of nutrition education. Although it is not a structured classroom activity with a set curriculum, nutrition information at POS may be evoking the nutrition knowledge and attitudes of students, just in time, to trigger informed choice of more healthful foods.

Results raise a question on the impact of combining classroom activities in nutrition with the posting of nutrition information. Would this prompt an even greater effect? Although we did not design this study to answer this question, further research using this type of labeling in conjunction with nutrition education would be appropriate.

More research is needed to determine whether these findings with Pennsylvania students can be generalized to a larger population. This study, however, did find similar results with students from a variety of ethnic backgrounds who live in rural, suburban, and urban areas of the state, and who chose food from a variety of foodservice systems. The term of the intervention was only six weeks. Further study is warranted to explore whether there will be a "wear out" effect in which students become desensitized to nutrition information and regress to former eating habits. Also of interest would be a study to determine whether the same effect can be obtained for fruit and vegetable consumption because this study solely concentrated on luncheon entrees. This study did not explore gender differences, yet research on reading the Nutrition Facts Panel on packaged goods found that female college students were more responsive than males to this type of information (Marietta, Welshimer, & Anderson, 1999).

School FSD could easily apply this study if nutrition information is already available in the district. For a small investment of time and money, she or he could make nutrition labels similar to those on packages, laminate and post them on the serving line, and see if benefits result. If so, it would be a win-win for both the program and students. Over time, students who change their eating behaviors to choose more healthful food will have an increased chance of maintaining an appropriate weight and developing healthy eating habits to last a lifetime.

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NUTRITION INFORMATION AT POINT OF SELECTION AFFECTS HIGH SCHOOL STUDENTS' SATISFACTION WITH FOOD CHOSEN

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ABSTRACT

Previous research has shown that supplying nutrition information at point of selection can influence high school students to choose healthier. However, does supplying this information increase student satisfaction with those choices, which could influence them to continue to make those healthy choices in the future? Four school foodservice directors from rural, suburban, and urban districts participated in the study. Satisfaction ratings were collected before and during the intervention for comparison using a one-way within subjects analysis of variance (ANOVA). Students in grades 9-12 from six schools were involved in the study. The results would suggest that supplying nutrition information significantly increases student satisfaction with not only the food served, but also with the food service.

INTRODUCTION

The school environment has the potential to impact the students' food choices and the satisfaction with those choices (French, Story, & Fulkerson, 2002, Conklin, Cranage, & Lambert, 2004). More than one half of students in the United States eat either breakfast or lunch from a school meal program (Dwyer, 1995). Diet quality is a major concern for adolescents. In the past decade, only 1% of youth met all the food consumption guidelines addressed in the U.S. Food Guide Pyramid (Munoz, Krebs-Smith, Ballard-Barbash, & Cleveland, 1997). Kant (2003) found that 30% of the daily calories American adolescents consume come from foods of low nutritional value, with sweeteners and desserts accounting for nearly 25% of this amount. Researchers have shown that changing these eating habits and/or increasing the intake of more healthful foods may be useful in lowering the incidence of obesity (Epstein, et al., 2001). Obesity among children and young adults has reached epidemic proportions. In the Surgeon General's "Call to Action to Prevent and Decrease Overweight and Obesity" (2001), the report states that 33% of children aged 6 to 11 years, and 34% of adolescents aged 12 to 19 years were overweight or obese. This is an increase of almost 200 percent in the last twenty years (the American Obesity Association, 2003).

A study by Croll, Nuemark-Sztainer, & Story (2001) found that healthy eating messages based on Dietary Guidelines for Americans are reaching adolescents, but that interventions are needed that help in the transition to healthier eating behavior. Strategies to alter eating behaviors, therefore, should match nutrition intervention with adolescents on the basis of motivational factors (Storey, Neumark-Sztainer, & French, 2002) and issues of the near environment. Satisfaction with the choice of healthier food may be a significant motivational factor.

School foodservice programs are not the only answer to improving children's weight and eating habits, but these programs interface with most students five days out of seven. Most school foodservice programs have the ability to give their students a choice in their meals. Those that do, however, often do not attempt to inform the students the differences in nutritional content among the choices they provide – which allows for an informed choice. Focus groups conducted with high school students to explore their perceptions of an ideal school foodservice program found that the availability of nutrition information was desired, especially information on calories and fat content of menu items (Meyer, Conklin, & Carr, 1997; Meyer & Conklin, 1998; Meyer, 2002). Most school foodservice directors calculate the nutritional content of each food item to meet USDA's Healthy School Meals Initiative, but fail to supply this desirable and useful information to students so they can make a healthy informed choice. Why are they reluctant to share this information with students? They may not understand the nature of informed choice and its role in increasing customers' perception of the food and the service and, therefore, its value.

Psychological research has demonstrated that people's reactions to events are determined largely by their mental

representation or construal of the events (Fiske & Taylor, 1984). It has been shown that when people are given a choice, they tend to hold an exaggerated belief that their behavior controls the outcome (Langer, 1975; Langer & Roth, 1975; and Langer & Rodin, 1976) and, therefore, take personal responsibility for the outcome (Weiner, 1995). This belief is likely to be stronger when the choice is informed than when it is not. In fact, a choice without relevant information about the choice (an uninformed choice) is likely to be viewed as not being a “true” choice or as no choice at all. An uninformed choice may bring into play a negative cognition of fairness or perceived justice (Collie, Sparks, & Bradley, 2000; McCollough, 2000; Mattila, 1999; and Mattila & Mount, 2000). However, research by Cranage and Sujan (2004) and Cranage, Sujan and Godbey (2004) shows that an informed choice increases satisfaction and loyalty even after a negative experience. The participants’ increased satisfaction with their choices was shown to be linked with increases in feelings of empowerment and self-determination. Based on their studies, Pawelko and Magafas (1997, p.29) state, “Adolescence is a time for individuals to test themselves and the world around them.” Suls’s (1989) discussion on self-identity and self-awareness in young adults emphasized the significant role that self-identity development plays as the center for all other youth decision-making. Providing information facilitates empowerment and self-determination in the decision making process (Lawler, 1992; Spreitzer, 1996). Child nutrition research shows that nutrition information affects children’s eating behaviors (Bordi et al., 2003; Butcher-Powell et al., 2003). A study by Conklin, Cranage, & Lambert (2004) showed that supplying nutrition information increased healthier food choices. Based on this research, it may be possible through informed choice, to influence students’ food selections and their satisfaction with those selections.

Purpose of the study

Based on the research cited above; particularly the research by Cranage and Sujan (2004) and Cranage, Sujan and Godbey (2004) that showed that participants had increased satisfaction with the choices they made when given information about those choices (informed choice) through feelings of empowerment and self-determination, and the research by Conklin, Cranage, & Lambert (2004) that showed that supplying nutrition information increased healthier food choices, the purpose of this research was to see if high school students supplied with nutrition information at point of sale (informed choice) have a greater sense of satisfaction with the food they choose.

METHOD

Study Population

School foodservice directors were solicited for participation in the study through electronic mail. Out of 10 directors from towns surrounding our University who received e-mails, six (60%) agreed to participate in the study. The study involved students in grades 9th through 12th.

Procedures

The University’s Internal Review Board approved data collection procedures, and in all instances, high school administrators and/or district school boards approved methods to solicit data on student satisfaction from students. During the first six weeks of school in fall 2003, the school foodservice program was conducted as “normal,” meaning no nutrition information was supplied. At the end of the first six weeks, a representative sample of students in grades 9 through 12 filled out the NFSMI High School Foodservice Survey to evaluate their satisfaction levels with their school foodservice program as a base line. Data were collected in classrooms and study halls. Students were given a letter of consent to participate and also were given the option of removing their survey from data analysis, if they so chose.

For the next six-week period, school districts supplied point of sale (POS) nutrition information for each entrée item. The nutrition information looked very similar to the Nutrition Facts Label designed by the U.S. Food and Drug Administration for package panels. Researchers calculated nutrition information for the districts that were not already calculating this type of information using Nutri-Kids software. We worked with the foodservice directors to establish a set format for presenting the information within the cafeteria service area to insure uniformity. Menus in all districts were the same or similar as the first six-week period.

At the end of the six-week treatment (POS nutrition information), a representative sample of students was again asked to fill out the survey to evaluate their satisfaction levels with the school foodservice program. Data collection procedures were the same in similar classroom settings.

Data Analysis

We analyzed pre and post data from the student satisfaction survey using a one way within subjects ANOVA, using the $MS_{(error)}$ from the overall analysis of variance table and means testing. Each school district was analyzed separately. In two school districts, we additionally compared a high school cafeteria with no treatment (control school) to a second high school cafeteria with informed choice as a manipulation check on nutrition information supplied. Additionally,

we compare differences in satisfaction between schools that did and did not supply nutrition information, but had identical menus. Here a one way between subjects ANOVA, using the $MS_{(error)}$ from the overall analysis of variance table and means testing was used. Lastly, we analyzed the data, in addition to treatment effects, for gender, grade, and frequency of lunch purchase effects on satisfaction.

RESULTS

Participants

We collected data from five school districts in Central and Eastern Pennsylvania (83% of the six directors originally expressing interest). Students in seven high schools were involved in the study with more than one high school in two districts. The schools were located in rural towns and mid-size cities. The number of reimbursable meals served in the high schools ranged from approximately 100 to 1,300. Each school district's ethnic make-up ranged from predominately Caucasian in the rural districts to predominantly Latino and African-American in the mid-size cities. The percent of free and reduced-price meals served varied from 4 to 72%. Daily revenue from a la carte sales ranged from \$200 to \$1,965. It should be noted that school #3 did not conduct the post treatment survey and was not included in the final analyses.

Manipulation Check

A manipulation check was run on our treatment by comparing the ratings before and after the introduction of nutrition information on the three measures in the Nutrition Category (nutrition information on food products is posted, information on calories contained in the food is posted, and information on fat contained in the food is available) in the student satisfaction questionnaire. In all the treatment schools, significantly higher scores ($p < .001$) were found in all three measures for the treatment period than for the non-treatment period. In contrast, the control (non-treatment) schools did not show higher scores. This would indicate that the nutrition information supplied was observed by the students and may explain the effects discussed below.

Student Satisfaction

ANOVA and two sample means testing shows that supplying nutrition information increases student satisfaction for food quality and for service quality. In all of the treatment schools, means for most of the six measures for food quality increased significantly ($p < .05$), as well as for several of the service quality (staff) measures. Supplying nutrition information not only increased student satisfaction with the quality of the food chosen, but also seems to spread to increase satisfaction with the service of the food. However, student satisfaction did not increase for food quality, service quality, or any other category in the two control (non-treatment) schools. In fact, in all the treatment schools the trend for almost all measures (although all were not significant) was increasing means. In the control schools, the trend was decreasing means, with some measures significantly lower ($p < .05$). We believe the decreasing trends in the control schools showed that students become bored with the menu offerings and/or cafeteria setting over time and have lower satisfaction with most aspects of the school food service. This would indicate that supplying nutrition information not only halted the decreasing trend associated with boredom, but significantly increased student satisfaction.

Supplying nutrition information is not a panacea. In the treatment schools, nutrition information had no effect on students' ratings of pricing, dining room ambiance, or perceptions of diversity. This however, would add evidence to the validity of the study. We would not expect nutrition information to increase satisfaction with room temperature, noise levels, or the cleanliness of the tables. Surprisingly however, even though students did not rate "time given for meal periods is adequate" any higher after the introduction of nutrition information, students did rate "time available to eat once seated is adequate" as higher. At first this might seem contradictory, but their ratings of "the number of servings lines is adequate" also increased after nutrition information was introduced. This would suggest that students knew that the time they were given for meal periods did not change, but when the nutrition information was introduced, selection of food items became easier and faster, giving the impression of more adequate serving lines and eating time. This phenomenon did not occur in the control schools. In fact, ratings for all three of these measures decreased, and in some cases significantly in the second survey as the school year progressed.

We also tested to see if gender, grade, or lunch purchase frequency as main effects could explain some of the results found on the satisfaction levels. The results indicate that neither gender ($p > .26$), grade ($p > .34$), nor frequency ($p > .46$) had a significant effect on any satisfaction score – for any of the schools. However, the data in all the schools implied some difference in gender, grade and frequency, although not at significant levels. For example, for both overall foodservice and food quality, satisfaction ratings dropped as grade level increased. Ninth grade ratings were higher than tenth, tenth were higher than eleventh, and eleventh were higher than twelfth. The opposite was true for service personnel ratings. Ninth had the lowest and twelfth had the highest ratings for satisfaction for service personnel (tenth and eleventh in

increasing order). These results are intuitively appealing since one would expect students to be more bored with the overall foodservice and food quality as they have more exposure to it, and more familiar and friendly (and possibly more satisfied) with service personnel as they have more exposure to them.

Further analysis did reveal some interaction effects. In each treatment schools, there was a gender x treatment effect for overall foodservice (i.e. $F_{(1, 507)} = 4.58, p < .03$), and for food quality (i.e. $F_{(1, 507)} = 8.81, p < .003$). There was no significant difference between males and females on satisfaction for overall foodservice with no nutrition information at point of selection (means male = 3.75 and female = 3.91, $t_{(253)} = 0.73, n.s.$), but a significant difference between males and females on satisfaction for overall foodservice with nutrition information at point of selection (means male = 4.05 and female = 4.39, $t_{(254)} = 2.16, p < .03$). Similar results were found for food quality. There was no significant difference between males and females on satisfaction for food quality with no nutrition information at point of selection (means male = 3.26 and female = 3.42, $t_{(253)} = 0.29, n.s.$), but a significant difference between males and females on satisfaction for food quality with nutrition information at point of selection (means male = 3.59 and female = 3.99, $t_{(254)} = 2.95, p < .003$). This would suggest that for females, more than males, nutrition information increased satisfaction for overall foodservice and food quality.

These findings would suggest that by supplying nutrition information students feel empowered and have a stronger sense of self-determination resulting in greater satisfaction with the quality of the food and the quality of the service. If supplying nutrition information also influences students to make healthier food choices, then the increased satisfaction could reinforce that choice and influence students to make the healthier selection again and again.

Additionally, total food selections were recorded, not as a part of this study but as a point of interest to the school districts. There was a distinctive increase in healthier (lower fat and calories) food selections as an aggregate number for all 9th through 12th grade students. However, specific selections could not be linked to our sample participants due to privacy restrictions, and therefore, statistical significance could not be evaluated for food choice.

PRACTICAL IMPLICATIONS

Nutrition information is used in most districts to meet the Healthy School Meals Initiative; potentially this same information could be made available at POS with very little additional cost. School foodservice directors can use the results of this study to evaluate the cost-effectiveness of fostering informed choice. Informed choice on nutrient content of food posted right where students make their food selections seems to be a subtle form of effective nutrition education. Prior research by the CDC (2000) has shown that adolescents know what foods are healthful; they just don't choose it for a variety of reasons. Although it is not a structured classroom activity, nutrition information at POS is giving students the information on which to make informed choices—and they seem to voluntarily choose more healthful food. A reasonable conclusion is that if nutrition information is already available in the district, for a small investment of time and money, a school foodservice director could make nutrition labels similar to the example given, laminate and post them on the serving line to see if the benefits suggested by this study result. If so, it would be a win-win for both the program and the students.

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SERVICE RECOVERY AND PRE-EMPTIVE STRATEGIES FOR SERVICES FAILURE LEAD TO CUSTOMER SATISFACTION AND LOYALTY

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ABSTRACT

Recent research has shown that giving an informed choice to customers can be an effective pre-emptive strategy to offset the damaging effects of service failure. However, does this strategy work when service failure occurs and the normal service recovery strategies of an apology and/or compensation are given? We propose that by combining pre-emptive and service recovery strategies customers would feel appreciation and respect for the service company for their disclosure and commitment to complete customer satisfaction. The principle finding was that customer satisfaction and loyalty were higher after a service failure when either an informed choice or an apology and/or compensation were used. However, the highest ratings for customer satisfaction and loyalty were recorded when both strategies were employed together.

Key words: choice, apology, compensation, post-recovery satisfaction, loyalty

INTRODUCTION

Service organizations are facing more intense competition for their customers than ever before. There is considerable customer pressure to provide high quality and consistent customer service. Despite management's best efforts to do this, service failures still occur, eroding the business's customer base. What affects consumers' loyalty following service failure? Are there strategies management can follow that will keep customers loyal even if they have a negative experience?

Several studies have shown that service failure reduces repeat business. Webster (1998) explored the effects of service types (restaurant dining and dry cleaning) and service failure on customer satisfaction and loyalty and found that, for both of these service types, service failures hurt loyalty. Bolton (1998) investigated the influence of service failure on the duration of customer relationships with ongoing service providers. She found that an increase in incidence of service failure shortens the duration of customer relationships. Kavanagh (1998) found that bad service rather than competitive pricing is the prime cause for the loss of repeat business. According to a report by the Henley Center, 80% of consumers will change suppliers if they are unhappy with their service. Thus, there is considerable evidence to suggest that bad service (service failure) leads to a loss of repeat business. The strategy this research suggests is for businesses to reduce their service failures.

LITERATURE REVIEW

There are many suggestions in the literature on how to reduce service failures. Sparks, Bradley, and Callan (1997) suggest that employee empowerment reduces service failure. Hurley (1998) suggests that service providers who are high in extroversion and agreeableness tend to provide better service. Bitner (1990) suggests that the more organized the service environment, the less the likelihood of service failure. Tehrani (1995) suggests that training reduces service failure. Wiersema (1991) advocates personality assessment during selection as a way to reduce service failure. Thus, the literature is replete with suggestions for ways to reduce service failure.

Such research, though useful, is not sufficient. Despite management's best efforts, service failures still occur. Restaurant managers can extensively train their service staff, but if sickness sends one or more servers home during a busy evening, or a tour bus unexpectedly stops at the restaurant, slow service may still occur. Even if hotels invest in quality construction of their rooms, a showerhead that suddenly breaks, or a very noisy party in the ballroom below or the room next door, can still be perceived as a service failure.

There are a few studies that look at reducing the effects of service failure after it has occurred. Goodwin and Ross (1992) suggests giving consumers the opportunity to voice their feelings mitigates the effect of service failure. She also suggests that an apology mitigates the negative effects of service failure. Smith, Bolton and Wagner (1999) suggest that

“recovery resources” that match the type of failure they experience mitigate the negative effects; so when the magnitude of the failure is large, the opportunity to complain or a simple apology is not enough, and compensation is required. Research in the hospitality literature shows apologies and financial compensation placate the customer, through feelings of perceived fairness (Mattila and Cranage, 2004), but are not always completely successful (Mattila, 1999; Mattila and Mount, 2000; Mattila, 2001).

Consequently, a supplementary avenue of research focuses on how to act *before* a potential service failure so that, if it occurs, its effects are buffered. Recent research (Cranage, 2004; Cranage and Sujan, 2004) has shown that giving an informed choice to customers can be an effective pre-emptive strategy to offset the damaging effects of service failure. The principle behind this strategy is that customers given an informed choice have increased feelings of self-attributions, share the responsibility for the service failure, feel more regret and stay more loyal. The research has shown that this strategy of informed choice keeps customers more loyal whether they choose a risky or safe alternative.

However, since repeat business has been shown to be extremely important in the continued success and survival of a business, can we combine some of these strategies to increase the likelihood of maintaining loyal customers? Does a pre-emptive strategy of giving customers an informed choice work when service failure occurs and the management additionally employs the service recovery strategy of an apology and/or compensation? Would customers still feel some responsibility for the outcome and still be satisfied and stay more loyal? Or would an apology and/or compensation give a mixed signal that the service establishment alone was responsible for the service failure?

An alternative perspective would be that by combining pre-emptive and service recovery strategies, customers would feel appreciation and respect for the service company for their disclosure and commitment to complete customer satisfaction. The principle of respect for disclosure and openness (Pennebaker 1995; Chow and Holden, 1997; Shockley et al., 2000) and feelings of enduring affective attachments and social exchange (Lawler, 1992; 2001; 2002; and Lawler, Thye and Yoon, 2000) underlies the sharing of responsibility (Cranage, 2004), and suggests that an informed choice not only continues to be beneficial when combined with an apology and/or compensation, but that the combination of the two strategies increases satisfaction and loyalty.

Based on the research above we pose the following hypotheses.

- H_{1a}: Customers given an informed choice, who then experience a service failure, will feel more satisfied and be more loyal than customers given no choice.
- H_{1b}: Customers given an informed choice, who then experience a service failure, will have higher feelings of self-attributions (self responsibility) than customers given no choice.
- H_{2a}: Customers who experience a service failure and then given an apology and/or compensation, will be more satisfied and more loyal than customers given no apology or compensation.
- H_{2b}: Customers who experience a service failure and then given an apology and/or compensation, will have higher feelings of perceived fairness than customers given no apology or compensation.
- H_{3a}: Customers given an informed choice, who then experience a service failure followed by an apology and/or compensation, will be more satisfied and more loyal than customers given only an informed choice, apology and/or compensation.
- H_{3b}: Customers given an informed choice, who then experience a service failure followed by an apology and/or compensation, will have higher respect for disclosure and feelings of commitment to customer satisfaction for the service company, than customers given only an informed choice, apology and/or compensation.

METHOD

Participants

Two hundred and eighty undergraduate students in a large northeastern university served as participants. The use of students should be appropriate since students are real life consumers of restaurant services. Slightly over half of the respondents were male with an average age of 22 years.

Procedure

An informed consent form told the participants that the purpose of the study was to evaluate a hypothetical experience in a restaurant. A 2 choice (no choice or informed choice) x 2 compensation (no compensation or compensation) x 2 apology (no apology or an apology) between-subjects design was used to test the hypotheses. Subjects were exposed to a written scenario describing a restaurant experience, and they were to imagine themselves as the customer in the scenario. The use of scenarios is justifiable because this method avoids the problems of intentionally imposing service failures on customers and it minimizes memory-bias, which is common in self-reports of service failures (Smith et al., 1999). In the no choice condition, the host selected a table for them, while in the informed choice condition, the host informed them that they could either have “a table in the middle of the dining room that is a little public but a great table for enjoying the

famous atmosphere of the restaurant and where the service is prompt,” or “a table by the large picture windows with a beautiful view overlooking the city, but this is always a busy section and therefore, always a considerable wait, often as much as 20 to 30 minutes for service.” All scenarios told the participants that they either chose or were seated at a table by the windows. Service failure was manipulated by a long wait--20 minutes for the waiter to get to the table, 10 minutes for the drink orders to arrive, and 15 minutes for appetizers. After another 25 minutes, the customer flags down the waiter and asks for some service. At that point, half of the scenarios included a polite apology and an explanation for slow service. The explanation was as follows: “This section of the dining room is always in demand because of the view of the city from the large picture windows, and because of that, the tables in this section are always full which means there is always a twenty (20) to thirty (30) minute wait for service in this section.” In the no apology condition, only an explanation for slow service was given. At the end of the meal, subjects in the compensation condition were given a complimentary dessert and a 20% discount off their total bill.

Measures

The measurement scales and a sample scenario are shown in Appendix 1. All the scale items were measured on a seven-point scale. Satisfaction with the overall dining experience was measured via a one-item scale adapted from Smith et al. (1999). Participants were asked to rate three statements that pertained to loyalty; these statements were taken from Maute and Forrester (1993). After rating their loyalty, participants rated the responsibility they felt for the service failure. They rated the statement: “I was to blame” (from Weiner, 1995) on the same 7-point disagree-agree scale, and allocated the percentage of responsibility for their negative experience to (a) the restaurant/host, and (b) self (ensuring that the two numbers added to 100%). The percentage corresponding to the self (X) was converted to a 1–7 range through the formula $1.0 + 0.06 X \%$. Perceived fairness was measured via a four-item scale adapted from Smith et al. (1999). A one-item scale adapted from Lawler (1992) was used to measure respect for disclosure (openness). Lastly, commitment to customer satisfaction was measured with a four-item scale adapted from Smith et al. (1999).

Additionally, participants were asked manipulation check questions. Using the same 7-point disagree-agree scales, participants indicated their agreement with: (1) they had been given a choice, (2) they had been given information by which to make a choice, (3) they had been given an apology, and (4) they had been given compensation. Finally, the realism of the scenarios was checked with three questions; (1) how realistic was the scenario, (2) how difficult is it to project yourself into the scenario, and (3) the reason given for the poor service was believable.

RESULTS OF THE STUDY

Scales

For the dependent variable loyalty, the scale had a coefficient alpha of 0.94. After converting the one attribution scale from percentages to a seven-point scale the two scales were then run in a reliability analysis resulting in a coefficient alpha of 0.97. The four-item scale for perceived fairness had a coefficient alpha of 0.95. Lastly, commitment to customer satisfaction, a four-item scale, had a coefficient alpha of 0.91.

Manipulation Checks

The next step in the analysis was to look at the manipulation checks for choice, information, apology and compensation. The participants were asked on a seven-point scale if they were given a choice, if they were given information to make an informed choice, and if they thought that they had been given an apology or compensation. The results of a means test show that in the informed choice scenarios, the participants felt significantly more often that they were given a choice over participants given no choice ($t_{(278)} = 58.65$; $p < .0001$), showing the choice manipulation worked well.

The manipulation check for information with informed choice versus no choice shows that those participants in the informed choice felt significantly more often that they were given information to make a choice over those in the no choice scenarios ($t_{(278)} = 43.88$; $p < .0001$).

Those participants in the apology scenarios and compensation scenarios felt significantly more often that they were given an apology or compensation than those in the no apology and no compensation scenarios ($t_{(278)} = 29.84$; $p < .0001$ and $t_{(160)} = 34.75$; $p < .0001$ respectively). This shows the apology and the compensation manipulations were successful.

Realism of the scenarios was checked with a seven-point, Likert scale (i.e., how realistic was the situation described in the scenario). As indicated by the mean rating of 5.54 for realism and 5.47 for projecting oneself into the scenario, subjects perceived the scenarios high in terms of mundane realism. Similarly, they gave high ratings for the

believability of the explanation for the service failure, mean of 5.50. There were no significant differences among the experimental conditions regarding the realism measures ($t_{(278)} = 0.05$; n.s., $t_{(278)} = 0.19$; n.s., and $t_{(278)} = 1.49$; n.s. respectively). The means used in the means tests are shown in Table 1.

Table 1 - Manipulation Checks

Given a Choice	N	Mean	SD
1. Informed Choice	140	6.64	0.67
2. No Choice	140	1.70	0.74
Information to Make the Choice			
1. Informed Choice	140	6.26	0.92
2. No Choice	140	1.59	0.86
Given an Apology			
1. Apology	140	5.92	0.91
2. No Apology	140	2.36	1.07
Given Compensation			
1. Compensation	140	6.09	0.93
2. No Compensation	140	1.99	1.04
Realistic			
1. Informed Choice	140	5.54	1.17
2. No Choice	140	5.55	1.07
Project Yourself			
1. Informed Choice	140	5.49	0.93
2. No Choice	140	5.47	0.97
Believable			
1. Informed Choice	140	5.59	1.03
2. No Choice	140	5.41	0.97

Test of H_1 : The Effects of Informed Choice on Satisfaction and Loyalty

H_{1a} predicted that customers given an informed choice would have higher satisfaction and loyalty than customers given no choice when they experience a service failure. The analyses reported for H_1 are from a 2 (choice: no choice and informed choice) between subjects ANOVA design that used the $MS_{(error)}$ from the overall analysis of variance table to test significance. With satisfaction as the dependent measure, a main effect for choice was observed ($F_{(1, 68)} = 123.30$, $p < .0001$). With loyalty as the dependent measure, a main effect for choice was also observed ($F_{(1, 68)} = 1725.99$, $p < .0001$). Supporting H_{1a} , in the informed choice condition both satisfaction and loyalty were higher (means: informed choice = 4.09, no choice = 2.31, $t_{(68)} = 11.10$, $p < .0001$ and means: informed choice = 4.11, no choice = 1.86, $t_{(68)} = 31.55$, $p < .0001$, respectively).

H_{1b} predicted that customers given an informed choice would have higher feelings of self attributions (self-responsibility) than customers given no choice when they experience a service failure. Supporting H_{1b} , in the informed choice condition self attributions were higher (means: informed choice = 6.14, no choice = 1.55, $t_{(68)} = 33.64$, $p < .0001$).

Test of H_2 : The Effects of Apology and/or Compensation on Satisfaction and Loyalty

We have suggested that customers have higher feelings of satisfaction and loyalty after receiving an apology and/or compensation versus those customers who received neither, and also have higher feelings of perceived fairness. H_{2a} predicted that customers given an apology and/or compensation would have higher satisfaction and loyalty than customers given no apology or compensation when they experience a service failure. The analyses reported for H_2 are from a 2 (apology: no apology and apology) and a 2 (compensation: no compensation and compensation) between subjects ANOVA design that used the $MS_{(error)}$ from the overall analysis of variance table to test significance. With satisfaction as the dependent measure, a main effect for apology was observed ($F_{(1, 68)} = 100.81$, $p < .0001$). With loyalty as the dependent measure, a main effect for apology was also observed ($F_{(1, 68)} = 233.32$, $p < .0001$). Supporting H_{2a} , in the apology condition satisfaction was higher (means: apology = 4.00, no apology = 2.31, $t_{(68)} = 10.04$, $p < .0001$), and loyalty was higher

(means: apology = 3.53, no apology = 1.86, $t_{(68)} = 15.27$, $p < .0001$). H_{2a} was again supported in the compensation condition, satisfaction was higher (means: compensation = 3.69, no compensation = 2.31, $t_{(68)} = 14.23$, $p < .0001$), and loyalty was higher (means: compensation = 3.51, no compensation = 1.86, $t_{(68)} = 20.25$, $p < .0001$). Lastly, when an apology was combined with compensation, satisfaction and loyalty were not only significantly higher than when neither were given (means: apology and compensation = 5.40, no apology or compensation = 2.31, $t_{(68)} = 18.06$, $p < .0001$ and means: apology and compensation = 5.45, no apology or compensation = 1.86, $t_{(68)} = 32.08$, $p < .0001$, respectively), but also significantly higher than when an apology alone was given (means: apology and compensation = 5.40, apology = 4.00, $t_{(68)} = 8.19$, $p < .0001$ and means: apology and compensation = 5.45, apology = 3.53, $t_{(68)} = 17.14$, $p < .0001$, respectively), and when compensation alone was given (means: apology and compensation = 5.40, compensation = 3.69, $t_{(68)} = 10.03$, $p < .0001$ and means: apology and compensation = 5.45, compensation = 3.51, $t_{(68)} = 17.31$, $p < .0001$, respectively). The results would suggest an additive effect with apology and compensation.

H_{2b} predicted that customers given an apology and/or compensation would have higher perceived fairness than customers given no apology or compensation. Supporting H_{2b} , in the apology condition perceived fairness was higher (means: apology = 3.56, no apology = 1.90, $t_{(68)} = 14.78$, $p < .0001$). H_{2b} was again supported in the compensation condition, perceived fairness was higher (means: compensation = 3.75, no compensation = 1.90, $t_{(68)} = 13.53$, $p < .0001$). Lastly, when an apology was combined with compensation, perceived fairness was not only significantly higher than when neither were given (means: apology and compensation = 5.46, no apology or compensation = 1.90, $t_{(68)} = 28.05$, $p < .0001$), but also significantly higher than when an apology alone was given (means: apology and compensation = 5.46, apology = 3.56, $t_{(68)} = 14.97$, $p < .0001$), and when compensation alone was given (means: apology and compensation = 5.46, compensation = 3.75, $t_{(138)} = 13.46$, $p < .0001$). Once again, the results would suggest an additive effect with apology and compensation.

Test of H_3 : The Effects of Combining a Pre-emptive Strategy with a Service Recovery Strategy on Satisfaction and Loyalty

In testing H_2 , we found an additive effect. Giving an apology or compensation to customers when they experienced service failure resulted in higher customer satisfaction and loyalty. However, giving both was even better. It seems they complimented each other and increased the customers' perception of fairness, and also increased satisfaction and loyalty. The research question we propose is—will combining a pre-emptive strategy of giving an informed choice and a service recovery strategy of an apology and/or compensation offset the benefits of each, or have an additive effect from the combination? H_{3a} predicted that customers given an informed choice, who then experience a service failure followed by an apology and/or compensation, will be more satisfied and more loyal than customers given only an informed choice, apology and/or compensation. The analyses reported for H_{3a} and H_{3b} are from a 2 choice (no choice or informed choice) x 2 compensation (no compensation or compensation) x 2 apology (no apology or an apology) between-subjects design that used the $MS_{(error)}$ from the overall analysis of variance table to test significance. Supporting H_{3a} , when customers were given an informed choice and an apology, satisfaction was higher (means: informed choice and apology = 5.20 informed choice = 4.09, $t_{(68)} = 6.59$, $p < .0001$), and loyalty was higher (means: informed choice and apology = 5.32, informed choice = 4.11, $t_{(68)} = 8.03$, $p < .0001$) than customers only given an informed choice. When customers were given an informed choice an apology, satisfaction was higher (means: informed choice and apology = 5.20, apology = 4.00, $t_{(68)} = 7.11$, $p < .0001$), and loyalty was higher (means: informed choice and apology = 5.32, apology = 3.53, $t_{(68)} = 18.17$, $p < .0001$) than customers only given an apology.

An informed choice combined with compensation was also higher for satisfaction (means: informed choice and compensation = 5.06 informed choice = 4.09, $t_{(68)} = 5.31$, $p < .0001$), and for loyalty (means: informed choice and compensation = 5.42, informed choice = 4.11, $t_{(68)} = 6.24$, $p < .0001$) than customers only given an informed choice. When an informed choice was combined with compensation satisfaction was higher (means: informed choice and compensation = 5.06, compensation = 3.69, $t_{(68)} = 7.49$, $p < .0001$), and loyalty was higher (means: informed choice and compensation = 5.42, compensation = 3.51, $t_{(68)} = 17.09$, $p < .0001$) than customers only given compensation.

Combining an informed choice with both an apology and compensation resulted in higher satisfaction (means: informed choice, apology and compensation = 6.37 informed choice = 4.09, $t_{(68)} = 13.24$, $p < .0001$), and for loyalty (means: informed choice, apology and compensation = 6.52, informed choice = 4.11, $t_{(68)} = 13.92$, $p < .0001$) than customers only given an informed choice. The same was found when compared against just an apology, for satisfaction (means: informed choice, apology and compensation = 6.37, apology = 4.00, $t_{(68)} = 13.74$, $p < .0001$), and for loyalty (means: means: informed choice, apology and compensation = 6.52, apology = 3.53, $t_{(68)} = 29.65$, $p < .0001$), and compared against an apology and compensation, for satisfaction (means: informed choice, apology and compensation = 6.37, apology and compensation = 5.40, $t_{(68)} = 5.63$, $p < .0001$), and for loyalty (means: means: informed choice, apology and compensation = 6.52, apology and compensation = 5.46, $t_{(68)} = 10.57$, $p < .0001$).

We suggest in H_{3b} that combining the two strategies increases customers' respect for disclosure (openness) and feelings of commitment to customer satisfaction for the service provider. Supporting H_{3b}, when customers were given an informed choice and an apology, openness was higher (means: informed choice and apology = 6.00 informed choice = 5.34, $t_{(68)} = 2.80$, $p < .005$), and feelings of commitment to customer satisfaction were higher (means: informed choice and apology = 4.93, informed choice = 4.34, $t_{(68)} = 3.22$, $p < .001$) than customers only given an informed choice. When customers were given an informed choice and an apology, openness was higher (means: informed choice and apology = 6.00, apology = 2.97, $t_{(68)} = 12.90$, $p < .0001$), and feelings of commitment to customer satisfaction were higher (means: informed choice and apology = 4.94, apology = 4.00, $t_{(68)} = 5.07$, $p < .0001$) than customers only given an apology.

An informed choice combined with compensation was not higher for openness (means: informed choice and compensation = 5.48 informed choice = 5.34, $t_{(68)} = 0.60$, n.s.), but was higher for feelings of commitment to customer satisfaction (means: informed choice and compensation = 5.11, informed choice = 4.34, $t_{(68)} = 3.97$, $p < .0001$) than customers only given an informed choice. When an informed choice was combined with compensation openness was higher (means: informed choice and compensation = 5.48, compensation = 2.23, $t_{(68)} = 13.77$, $p < .0001$), and feelings of commitment to customer satisfaction were higher (means: informed choice and compensation = 5.11, compensation = 3.89, $t_{(68)} = 6.33$, $p < .0001$) than customers only given compensation. It would seem that an informed choice, and an apology contribute to openness and are additive, but that compensation does little for feelings of openness (respect for disclosure). However both an apology and compensation appear to contribute additively with an informed choice to feelings of commitment to customer satisfaction.

Combining an informed choice with both an apology and compensation resulted in higher openness (means: informed choice, apology and compensation = 6.43 informed choice = 5.34, $t_{(68)} = 4.49$, $p < .0001$), and for feelings of commitment to customer satisfaction (means: informed choice, apology and compensation = 6.20, informed choice = 4.34, $t_{(68)} = 10.34$, $p < .0001$) than customers only given an informed choice. The same was found when compared against just an apology, for openness (means: informed choice, apology and compensation = 6.43, apology = 2.97, $t_{(68)} = 14.30$, $p < .0001$), and for feelings of commitment to customer satisfaction (means: means: informed choice, apology and compensation = 6.20, apology = 4.00, $t_{(68)} = 12.25$, $p < .0001$), and compared against an apology and compensation, for openness (means: informed choice, apology and compensation = 6.43, apology and compensation = 3.69, $t_{(68)} = 11.35$, $p < .0001$), and for feelings of commitment to customer satisfaction (means: means: informed choice, apology and compensation = 6.20, apology and compensation = 4.86, $t_{(68)} = 7.48$, $p < .0001$).

DISCUSSION

This research extends the literature of informed choice in customer perceptions of the service recovery processes. The pre-emptive strategy of customer choice in the service process has been investigated for labor savings (Fitzsimmons, 1985; Mills et al., 1983; Mills and Morris, 1986) and positive motivation of the customer (Kelley, Donnelly and Skinner, 1990; Lengnick-Hall, 1996). However, the idea of giving customers choice from the perspective of empowerment and self-determination—some control over the service delivery process (Cranage, 2004; Cranage and Sujana, 2004; Mattila and Cranage, 2004) has only recently been investigated in the service recovery literature. In addition, we explored the effects of combining an apology and compensation.

The examination of an informed choice, an apology, and compensation we report here makes three contributions. First, it explicates the process by which an informed choice, a proactive strategy, raises or sustains customers' satisfaction and the desire to stay loyal with the service provider after a service failure. The research suggests that this is a result of the customer's increased feelings of self-attributions/responsibility for the service failure. Other emotions could be identified in future research as mediators of the responsibility-satisfaction-loyalty relationship.

The second contribution is the finding that an apology and/or compensation also sustain or increase satisfaction and loyalty after a service failure, and it is possibly explained by increased feelings of perceived fairness. This finding provides an if-then rule of thumb for emotionally intelligent behavior among service providers. By identifying additional if-then rules, through more research, elaborate emotion quotient (e.e.q.) training (which emotion to manage when) of service providers will become possible.

Thirdly, the research shows that the two strategies do not have to be mutually exclusive in their application. Intuitively, it would seem that applying the two strategies together would cancel out the benefits of each. If an informed choice causes customers to feel some responsibility for the service failure because they feel they have some control over service delivery process, and an apology and/or compensation conveys that the service provider is trying to be fair because he is to blame, then it is possible for the customer to feel neither more satisfied nor more loyal. However, the research on respect for disclosure and openness (Pennebaker, 1995; Chow and Holden, 1997; Shockley et al., 2000) and feelings of

enduring affective attachments and social exchange (Lawler, 1992; 2001; 2002; and Lawler, Thye and Yoon, 2000) might suggest another view. By combining the two strategies, customers feel that the service provider is trying to do everything possible for the guest to enjoy their service experience. An informed choice before a service failure, and an apology and/or compensation after, conveys the sense that the service provider is being open, and the customer feels respect for their disclosure and their commitment to customer satisfaction. The end result is even higher satisfaction and loyalty than either strategy alone.

MANAGERIAL IMPLICATIONS

The findings of this study highlight the benefits of a pro-active management of the service recovery process. Since service failures are inevitable in most hospitality industries, service providers should offer customers some choice over the service delivery process. When given choices, customers are likely to feel that to a certain extent they have themselves to blame for the unfavorable outcome. However, customers may still expect something more if a failure occurs. Regardless of choice, people may want to be compensated for the inconvenience. Therefore, a comprehensive recovery strategy needs to include tangible compensation for the failure and/or an apology. Our results clearly indicate the additive effects of combining an informed choice with compensation and apology.

To implement these strategies we suggest giving customers some control over the service process. Since an informed choice is generally easy to provide and is, surprisingly, rarely offered by service establishments, we believe our research has a far reaching practical value. Hotels, recreational parks and theaters, not just restaurants, can easily develop systems that allow them to offer their customers informed choices. Front-office clerks could inform hotel guests about room types and their respective advantages and disadvantages. For example, the front desk clerk could inform the guest, "you could have a room on the third floor near the elevator with quick and easy access, but somewhat heavier traffic, or a room on the eighteenth floor at the end of the hall that would be quieter, but can be a long haul back and forth." By supplying the guest with this informed choice, a guest who couldn't sleep well due to the heavy traffic or feels exhausted from long elevator rides and long walks in the hallway, has partly himself to blame.

Limitations

The two primary limitations to this study are the use of college students instead of actual customers, and the use of scenarios. The use of actual customers and subjecting them purposely to bad service would have ethical implications. Additionally, getting approval by the committee on human subjects and any service establishment would be difficult. Some may feel that college students are incapable of loyalty behavior. To the contrary, college students often display strong loyalty to brands and companies. College students can often be the most loyal customers (Langer, 1997; and Hite & Hite, 1995). It is also important to note that the participants were asked to rate their loyalty to a restaurant for which they had no personal history. A criterion that has been often used in research related to choice is re-purchase intentions, the intention to buy once again what was chosen earlier (e.g., Tsiros and Mittal, 2000). In the service industry the intention to once again do business with the service establishment is the most important repurchase not whether the same item is repurchased. This criterion, commitment to the establishment, is termed loyalty (Hirschman, 1970). Defined it is the decision to stay with the service establishment in the hope that things will improve. As Hirschman points out, this decision does not require a personal history with the establishment.

The use of scenarios may lose some strength in effect of beliefs, emotions and behaviors, but the fact that significance was still found in satisfaction and loyalty as well as self-attributions, perceived fairness, respect for disclosure, and commitment to customer satisfaction in the laboratory only attests to the strength of the results. In addition, scenario methodologies have been used in highly cited and regarded research on customer's reactions in service encounters (e.g., Smith, Bolton and Wagner, 1999; Sutherland, et al., 1989).

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AN ANALYSIS OF SKILLS AND COMPETENCIES OF FULL-SIZE HOTEL TECHNOLOGY MANAGERS AS
PERCEIVED BY HOTEL MANAGERS

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ABSTRACT

A survey of 104 hotel managers was conducted to identify the Information Technology (IT) skills and other competencies needed by IT managers at the hotel property level. A factor analysis was conducted to condense 42 skills identified through review of literature and a focus group. The top three most important skills needed for a hotel IT manager were: *Communication* (3.60) *Critical Thinking* (3.57), and *IT Knowledge* (3.42). The least important skill needed for a hotel IT manager was the *Knowledge Management* factor. This shows that soft skills are very important for the hotel IT manager's job requirements.

INTRODUCTION

The purpose of this study was to identify the skills needed by hotel IT managers at the property level at full service hotels as perceived by property and corporate IT managers. In addition, this study explored educational background of current IT managers in hotels in order to learn whether they had an IT background or not. The objective of this study was to recommend skills set needed by hotel schools to be used in hospitality management curriculum. This study made two unique contributions to the literature of hospitality research: 1) it investigated the IT skills needed by property level IT managers in full service hotels; 2) it compared the skill set defined by property level IT manager and corporate IT managers. The findings of this study will help hospitality IT faculty a guideline to design an effective IT course.

Information Technology (IT) is becoming an integral part of business strategies and operations (Laudon & Laudon, 2003). Hospitality Industry is no exception (Collins, Cobanoglu & Malik, 2003). IT managers have an important role in the management of chain hotels (Nyheim, McFadden & Connolly, 2004). In the recent years, hospitality companies started to have an IT department at the property level. Traditionally, these IT managers have been either front office managers or accounting controllers who happened to have IT interests and skills. However, with the advancement and the level of technology used in hotels, the need for a hotel IT manager becomes very clear

Statement of Problem

There are some studies that investigated the IT competencies and IT skills needed by department managers in hotels at the property level (Cobanoglu, Connolly & Piccoli, 2003). There are limited studies that address the skill set needed by property IT managers in full service hotels. The goal of this study was to find out skills & competencies needed by property level IT managers in full service hotels.

Research Questions

- 1) What are the skills needed by a property level IT manager in a full-service hotel?
- 2) Do IT managers in property level have and IT or IT related Bachelor of Science degree?
- 3) Do IT managers in property level in full-size hotels have an IT background?
- 4) Are IT related courses a requirement for qualification for an IT position at the property level?

Delimitations

The first limitation is that the sample was drawn from *Hospitality Technology* Magazine subscribers. Therefore, the findings cannot be generalized beyond that target population. Another limitation is the sample size itself.

METHODOLOGY

In this study, a descriptive, online cross-sectional survey research design was employed. The target sample consisted of 1000 technology managers that were current subscribers of *Hospitality Technology* magazine as of November 2004 and randomly selected. The list of the respondents is provided by *Hospitality Technology* magazine. All of the sample members had an email address, therefore, only the online version of the survey was conducted. The survey instrument had four sections. The first section asked questions related to respondents' career path and education. The second section listed 42 skills and competencies. These skills and competencies were obtained from review of literature. These skills were sent to 5 hotel technology managers for content validity and reliability. Necessary changes were made based on their comments. In this section, survey participants were asked to rate the importance of 42 skills and competencies for a hotel IT manager. A four-point Likert scale response format (1 = not important: 4=very important) was used in the importance measurement portion of section two. A four-point scale was used because using a five point scale may produce "central point bias" where some respondents may select "Neutral" even though they may not have an opinion (Moser & Carlton, 1972 as cited in Converse & Presser, 1986). Instead a non-numerical option (No opinion) was provided. The third section listed five statements related to IT departments in hotels. In this section, survey participants were asked to determine the level of agreement with the statements in their organizations. A four-point Likert scale response format (1 = strongly disagree: 4=strongly agree) was used in the agreement measurement portion of section three. The final section of the survey consisted of demographic questions and property characteristics.

FINDINGS

One hundred twenty-four emails were not valid so they were excluded from the total number of sample size, yielding an effective sample size of 876. A total of 104 responses were received with an 11.8% response rate. Table 1 shows the demographic characteristics of the respondents and their IT background. Research question # 2 questioned if the respondents had IT educational background. Almost half of the respondents have a bachelor degree in various fields. Twenty-one percent have masters degree mainly MBAs, 15.4% have high school diploma, 6.7% have a certificate or diploma, and 5.8% have an associate degree in various fields. Respondents had certificates or diplomas in IT, management, broadcasting, marketing, and political sciences. The respondents who had associate degree had their degree in business and general studies. In terms of bachelor's degree, the fields varied from accounting to architecture, business, engineering, government, hospitality, MIS, music, and political science. Almost 40% of the respondents were between 41-50 years old while 26.9% were between 31-40, 19.2% were between 51-60 and 7.7% were between 26-30 and finally 7.7% of them were older than 60 years old. Almost half of the respondents (46.2%) had more than 10 years experience in information technology related jobs while 25% had between 5-10 years, and 15.3% had 1-3 years. Thirty-four percent of the respondents did not take any IT related courses while 19.2% took more than 8 courses. About 15% took only one IT course, 7.7% took 2 courses, and 11.5% took 3 courses. Research question #4 questioned if the respondents needed an IT certification for hotel IT positions. For 36.5% of the respondents, IT related courses are a requirement for qualification for an IT position at their properties. Only 13.5% of the respondents reported that an IT related certification is a requirement for qualification for an IT position at their properties. Twenty-six percent of the respondents attended an IT related certificate program.

The most frequently first job title that ended up in IT related fields in hotels was Front Office Manager/Assistant FO Manager (16.5%) followed by Front Office Supervisor/FO Assistant (12.6%) and Restaurant Manager/ F&B Manager/Assistant F&B Manager (10.7%). In terms of previous job compared to current jobs, the most frequently reported job title was Technology Director/IT Manager/ IS Manager (property level) (16.5%). In terms of current job title, 36.5% of the respondents were Technology Director/IT Manager/ IS Manager at the property level, 13.5% were General Manager, 11.5% were CEO or President, and 8.7% were Chief Information Officer/ Chief Technology Officer at the corporate level. This shows that majority of respondents who are currently in IT positions in hotels start with other jobs other than IT and somewhat end up in IT. This can be verified from the analysis of the degrees. Only a handful of them had IT related degrees such as computer science or management information systems.

Factor Analysis: IT Skills and Competencies

The factor analysis explained 71.40 percent of the total variance. The contents of the nine factor dimensions were analyzed and named as follow: *IT Knowledge*, *Knowledge Management*, *Writing and Reading Skills*, *Critical Thinking*, *Systems Analysis and Design*, *Leadership*, *Operations and Technology Analysis*, *Communication and Specialized Software* (See Table 3). The *IT Knowledge* factor had the highest Eigen Value, 11.44, and represented 27.25 percent of the explained variance. The second highest Eigen Value was the *Knowledge Management* factor. This value of 4.26 represented 10.14 percent of the explained variance in the sample. The *Writing and Reading Skills* factor had an Eigen Value of 3.74 and represented 8.91 percent of the variance in the sample. The *Critical Thinking* factor had an Eigen Value of 2.32 and represented 5.52 percent of the variance in the sample. The *System Analysis and Design* factor had an Eigen Value of 1.91 and represented 4.56 percent of the explained variance. The *Leadership* factor had an Eigen Value of 1.80 and represented

4.30 percent of the explained variance. The *Operations and Technology Analysis* factor had an Eigen Value of 1.60 and represented 3.82 percent of the explained variance. The *Communication* factor had an Eigen Value of 1.49 and represented 3.56 percent of the explained variance. Finally, the *Specialized Software* factor had an Eigen Value of 1.38 and represented 3.29 percent of the explained variance. Table 3 shows all the factors with loading Eigen values and the items that load on these factors. The summation scores of these factors will be used in the subsequent analyses.

Research Question 1: What are the skills needed by a property level IT manager in a full-service hotel?

To answer this question, a mean score for each factor was calculated and ranked based on their importance scores. The most important skill needed for a hotel IT manager is *Communication* (3.60) followed by *Critical Thinking* (3.57), *IT Knowledge* (3.42), *System Analysis and Design* (3.27) and *Writing & Reading Skills* (3.25). The least important skill needed for a hotel IT manager is *Knowledge Management* factor. This shows that soft skills are more important than technical skills for hotel IT managers.

CONCLUSIONS

Based on the findings of this study, the following may be concluded:

1. Majority of the IT managers in hotels do not have a computer related Bachelor of Science degree. In fact, the majority of them had business degree including hospitality management.
2. The majority of the IT managers in hotels did not come from IT related jobs. They somewhat ended up in IT positions in the hospitality industry. Majority of them learned the technical skills on the job. In addition, the majority did not have IT-related courses in their educational background, and they primarily learned the required technical skills on the job, through some IT courses later in life, or some certification programs. Given that nearly half of the respondents were age forty and beyond, this conclusion is not surprising.
3. Although some properties required IT-related courses and certification, the majority did not require such courses or certifications as a qualification for the position of an IT manager in a hotel.
4. The most important skill to be a hotel IT manager is *Communication*, followed by *Critical Thinking* and *IT Knowledge*. Technical skills come third in the list. This shows that an education geared towards communication and critical thinking along with IT Knowledge is the key to produce qualified IT personnel for hotels.
5. Skills needed by a hotel IT manager did not differ between IT managers at the property level and corporate level. This shows that both IT managers at the property level and corporate level think and demand the same.

Based on the findings and conclusions, the following may be recommended:

1. Given that *Communication*, followed by *Critical Thinking* and *IT Knowledge* were the most important competencies expected from IT managers, hospitality schools can better meet the market needs by reviewing their curricula and matching courses with these important skills. Adding IT courses, besides the basic computing courses, can enhance the chances for hospitality students seeking IT management positions at the property level.
2. Hospitality faculty may integrate specialized software into their curriculum. For example, in Front Office course, the instructor may teach Fidelio PMS software as part of his/her curriculum. This will enhance the confidence level of hospitality students in hospitality IT knowledge area. Even though Fidelio may be an expensive software, the schools can obtain the demo version which has full functionality but in a limited scale (250 transactions). Some hospitality technology textbooks come bundled with demo version of Fidelio PMS software. Other hospitality technology vendors can be contacted for full functional demo versions of their software.
3. The current IT managers in the hospitality industry seemed not to have chosen their careers intentionally by preparing themselves via college programs. With the advance of technology and the hotel IT functions gaining significance, the present conditions may change. Hospitality schools may do well by adding a focus, specialization, or a minor in Hospitality IT area. This way, graduates will have a better understanding of the required skills and therefore, make more informed decisions.

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CHANGES IN HONG KONG RESTAURANTS AS REFLECTED IN NEWSPAPER ADVERTISING

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ABSTRACT

This paper, using a content analysis approach, analyzed restaurant advertisements in English and Chinese language newspapers in Hong Kong. Changes over thirty years from 1969-2000 were examined. The differences between the Chinese and English language press were also assessed. Many interesting findings were presented with regard to the changing number of restaurant advertisements over the years, number of restaurant advertisements offering coupons and discounts, mentioning of price, service style, and restaurant style. These findings would provide a better understanding of the advertisement trends in Hong Kong's restaurant industry.

INTRODUCTION

Hong Kong has the world's highest concentration of restaurants, with one for every 700 people, yet little is known about the customer perception and restaurant evolution. Over the past thirty years different foods and foodservices have been introduced to an already well-saturated local restaurant market. This study evaluates the changes in restaurant advertising over the past three decades and assesses the differences between the local Chinese and English language press.

Background

According to Pitte (1999) the origin of restaurants goes back as far as recorded history when foods were prepared to sell to peasants and artisans when they left home to sell their goods at markets. Inns and way stations were found along major roads in the Roman Empire and also in ancient China. Street kitchens were later turned into what we know today as restaurants.

Hong Kong is a trading center richly imbued with food culture, offering great local cuisine and a wide variety of dishes from dozens of other countries and provinces. Hong Kong has approximately one legal place to eat for every 700 residents. This per capita number is even more impressive when those operations under the regulators' radar are included, such as many of the fish-ball stalls and alleyway "daipaidongs". Hong Kong residents spend over half of their food budget on food eaten away from home. Not surprisingly, according to the Hong Kong Census and Statistics Department the total restaurant receipts for 2000 was almost US\$7.5 billion.

Advertising

Newspapers are the reflection of events as well as the local multi-cultural society and can give numerous indications on the way of life of its population, which can be reflected in advertising. Money spent on newspaper advertising exceeds all other media (Egbert, 1981). Advertising can be annoying on television or radio, but is expected and often searched for by newspaper-readers. Newspaper advertisements can be placed overnight at reasonable rates for specific locations. Newspapers do not offer the glamour of other media, however its timeliness, ability to generate immediate responses and flexibility make it an important forum for hospitality advertising. When properly used, newspaper advertising allows the restaurateur to inform, persuade, and build its image for both short and long-term results. Restaurateurs sell promises of certain kinds of experiences. The predicament for restaurateurs is to make intangible products into tangible ones in the minds of the potential buyers. This is generally done through advertising, sales promotions, publicity, and personal selling. Advertising is used to attract potential customer's attention and to make them aware of a particular restaurant by creating a desire to experiment and create an action on the part of the buyer.

Hong Kong's Press

Hong Kong's press must be one of the world's most prolific. In the 1990's there were 77 registered newspapers and 619 periodicals (GIS, 1994). While only twenty of the dailies are newspapers in the strict sense of the word, the others being specialist publications devoted mainly to horse racing or show business, it is an astonishing statistic for a population of just over six million (Bonnin, 1995). Furthermore, the press in Hong Kong is in fact two, the Chinese and the English language press. The same press moguls often run them both, but their characteristics are quite different. The readership of the Chinese language press is 96 % Hong Kong Chinese, with the remainder Chinese readers in China itself and overseas. The English language press, while essentially targeting expatriates, is also read by a highly educated fraction of the local population, but also has an international readership, mainly consisting of, politicians and academics interested in business.

METHODOLOGY

This study used a content analysis approach of Hong Kong newspapers over a thirty year period. It focused on two English newspapers; the South China Morning Post and the Hong Kong Standard and two Chinese language newspapers; the *Ming Pao* and the *Sing Tao*.

These papers were selected because of their years of existence and availability on microfilm in order to have continuity for the analysis. For this reason the weekly and the monthly press were not selected along with recent newspapers like the *Pingguo Ribao* (Apple Daily) have not been chosen for the same reason.

Because of the potential vastness of data, a workable preliminary random sample was selected in order to have a manageable amount of data. Therefore, six issues a year, for selected years were chosen, according to the following principles. First, one newspaper every other month was selected. For the odd years the odd months were considered, and for the even years, the even months. The days of the week featuring food pages or the greatest amount of restaurant advertising were selected for each newspaper, starting in 1999 and working backwards to 1969. Finally, some years were taken out of the sample. More precisely, the selected years were: 1969 and 1970 (because of the riots); 1975 and 1976 (a mid-term period, useful in order to make comparisons); 1980-1981 (a period of rapid evolution in term of consumerism). After 1984, the political and economic life of Hong Kong made it difficult to eliminate special years.

Considering the above principles and the availability of materials, 528 issues (i.e. about 1% of the total number of issues of the four selected newspapers) were considered for the analysis.

Only restaurant advertisements were extracted from these newspapers. The content and characteristics of each advertisement were investigated and categorized for frequency analysis purposes. A computerized database was created, using the French Modalisa software, to organize the collected material. The information was classified according to parameters such as restaurant concept and style and the type of information given in each ad.

FINDINGS AND DISCUSSION

The total number of restaurant advertisements was 2,147 of which 1,569 (73%) were in the English language press and 578 (27%) in the Chinese language press. The distribution between the four newspapers was Sing Tao: 199, the Ming Pao: 379, the South China Morning Post: 631, and the HK Standard: 938.

Table 1
Number of Restaurant Advertisements per Newspaper

Newspaper name	Number	%
Sing Tao	199	9.3
Ming Pao	379	17.7
South China Morning Post	631	29.4
Hong Kong Standard	938	43.7
TOTAL	2,147	100

The amount of restaurant advertisement was consistent amongst these four newspapers in the seventies. Of the 22 years under investigation certain years had higher than average, above 10 percent, of the total advertisement. The highest concentration of these restaurant advertisements appeared in the 1980s, the consumerism years. For the Sing Tao 36.7 percent of advertisements of the 22 years under investigation appeared in 1987/8, the Ming Pao had 25.5 percent of its ads appear in 1989/90. For the SCMP 60 percents of all its advertisements appeared between 1986-88 and for the HK Standard this number was at 65 percent for 1984-87. The restaurant advertisements fell again in the early nineties, as the restaurant business was booming, but all papers saw an increase in 1998/9 during the Asian financial crises, the post-1997 fall of visitor arrivals, and the bird-flu (Avian influenza). The increase was greater for the Chinese language press.

Some advertisements included coupons or discounts to attract potential customers and monitor the ad's effectiveness. Discounts and coupons were much more prevalent in the Chinese language press, 14.6 and 33.5 percent as opposed to 4.3 – 4.6 percent of the time in the English language papers.

These discounts and coupons, used to attract customers and monitor the advertisement effectiveness, were more prevalent in the mid-eighties following the 1984 Sino-British joint declaration and during the Asian financial crisis in the late nineties. It may be concluded that when business and consumer spending are down, restaurants offer discounts and/or coupons to entice customers. The Chinese language press had a greater amount of discounts and coupons, because the local population is affected first by economic slow downs and is more price conscious, than the wealthier local and expatriate community. The use of coupons in restaurants is also more socially acceptable by Hong Kong's Chinese as opposed to its Western population. According to Stein (2000) restaurant customers would be too embarrassed to pull out a coupon if they were entertaining a client. Instead more expensive establishments, especially the four and five star hotels of Hong Kong, have started offering privilege cards, for a specific slow business period offering discounts up to 50 percent in their food and beverage outlets. These privilege cards have been sold at a premium to secure repeat customers for an extended period, such as during the Asian financial crisis of the late nineties (Stein, 2000). Interestingly, Tele marketing, not newspaper advertisements, has been used to sell these cards.

Chinese have traditionally been encouraged to save money according to Tse (1996). Furthermore, Hong Kong Chinese are bargain hunters. This was further reflected by a price being mentioned in the ad. The Chinese language press mentioned price (40-50%) twice as often as the English language press (20%). See table 2.

Table 2
Price Mentioned in Advertisement

Price	Chinese Language Press				English Language Press			
	Sing Tao		Ming Pao		SCMP		HK Standard	
	Number	%	Number	%	Number	%	Number	%
Yes	79	39.7	187	49.3	126	20	190	20.3
No	120	60.3	192	50.7	505	80	748	79.7
TOTAL	199	100	379	100	631	100	938	100

Service styles were mentioned in 30 to 40 percent of the ads, see table 3. Set meals were referred to from 8 to 24 percent, with the greatest percentage in the Chinese language popular press, the Sing Tao Daily. Buffets are a very fashionable service style in Hong Kong Western restaurants such as Hotel coffee shops. This service style permits many people to be served within a short time frame, while allowing people with limited knowledge of Western foods to try many things at a perceived bargain. "All-you-can eat" buffet, was cited in 8 to 15 percent of the ads. Other service styles pointed out in the sample were: fine dining, takeaway and delivery, and lunch box, which were all more prevalent in the English language press. The first three can be explained as the readership of the English press is wealthier and Westerners, both locals and tourists, are more accustomed to takeaway and delivery.

Table 3
Service Style Mentioned in Advertisement

Service style	Chinese Language Press				English Language Press			
	Sing Tao		Ming Pao		SCMP		HK Standard	
	Number	%	Number	%	Number	%	Number	%
None	125	61.9	280	72.2	428	69.3	661	65.5
Set Meals	48	23.8	31	8	65	10.5	141	14
Buffet	21	10.4	61	15.7	72	11.7	79	7.8
Fine Dining	1	0.5	3	0.8	8	1.3	35	3.5
Takeaway	4	2	0	0	14	2.3	28	2.8
Delivery	0	0	4	1	10	1.6	35	3.5
Lunch Box	0	0	0	0	4	0.6	0	0
Other	3	1.5	9	2.3	17	2.8	30	3
TOTAL	202	100	388	100	618	100	1,009	100

The mention of lunch boxes in the SCMP was from one sandwich and three Indian restaurants. However, many locals eat their lunch out of Styrofoam boxes bought from small curbside food outlets. The omission of lunch box

advertising in the Chinese language press means these small operators can not afford newspaper advertising, but rely on location, printed ads handed out in heavy used pedestrian areas, and word-of-mouth advertising.

As expected, the Chinese language press predominantly advertises for Chinese restaurants (55-60%) and two-thirds of these ads were for Cantonese restaurants (43%). The Sing Tao and Ming Pao dailies carried between 10-20 percent of Western and 10-17 percent Asian restaurant ads. The English language press was more diversified 20-30 percent of the ads were for Western, 25-35 percent for Chinese, and 30 percent for Asian restaurants. See table 4.

The high number of Cantonese seafood restaurants in the HK Standard, an English language newspaper, can be explained by the fact that the Sing Tao Press Group owns the Sing Tao newspaper and the HK Standard. Advertising packages including both papers at a special rate could account for this.

The Indian restaurant category was well represented in the English language press. The reason for this is that there is a large Indian community in Hong Kong and consequently many Indian restaurants. These restaurants cater to the local Indian, Western tourists and expatriates, which is representative of the readership of the English language press. Hong Kong Chinese are not particularly fond of spicy foods and associate Indian food with low class.

Table 4
Top Three Concepts for Each Newspaper

Top 3 Concepts	Chinese Language Press		English Language Press	
	Sing Tao	Ming Pao	SCMP	HK Standard
1	Cantonese Seafood (25.2%)	Cantonese Seafood (30%)	Indian (12.5%)	Cantonese Seafood (15.1%)
2	Cantonese/other (17.7%)	Cantonese/other (13.4%),	Asian/other (9.9%)	Indian (12.5%)
3	Shanghai/Peking (9.7%)	Western/other (7.0%)	Steak House/American (9.3%)	Asian/other (7.7%)

Fast-food restaurants, notorious for their large advertising campaigns and budgets, had very low to no newspaper advertising during the 22 years under investigation. Other forms of media, notably television, could have been used to introduce Hong Kong to Fast-Food. Theme restaurants, like Planet Hollywood and Hard Rock Café which came to Hong Kong in the nineties, advertised only once during the years under study. This might be explained by the fact that these chains relied on public relation tactics rather than paid newspaper advertising.

A chronological analysis of the restaurant advertisements by Chinese, Western and Asian restaurant concepts shows that the Chinese language press started introducing ads for restaurants other than Chinese in the eighties. The reasons for the introduction of Western and Asian (non-Chinese) ads might have been the consumerism evolution, the increase of disposable income, and the awareness and readiness to try new things. For the English language press the other than Western restaurant advertisements was always present, but greatest in the eighties.

Table 5
Restaurant Advertisement by Ownership per Newspaper

Ownership	Chinese Language Press				English Language Press			
	Sing Tao		Ming Pao		SCMP		HK Standard	
	Number	%	Number	%	Number	%	Number	%
Hotel Restaurant	19	9.6	105	27.7	79	12.5	79	8.4
Group/chain	38	19.1	113	29.8	152	24.1	117	12.5
Independent Restaurant	130	65.3	158	41.7	388	61.5	711	75.8
Not Known	12	6.0	3	0.8	12	1.9	31	3.3
TOTAL	199	100	379	100	631	100	938	100

Restaurants were divided into three categories of ownership; hotel, stand-alone, and chain restaurants. See table 5. Most ads were placed by freestanding restaurants (42-75%), followed by restaurant chains (13-30%) and hotel restaurants (8-28%). Hong Kong hotels have public relation departments, which are able to generate "free advertising" such as food critiques and articles. The high percentage of hotel restaurant advertising, 27.7 percent, in the Ming Pao Daily might be explained by the fact that it is an intellectual newspaper read by local businessmen. Since entertaining business clients is

part of the local business culture, it makes sense that hoteliers have advertised their five star Western and Chinese dining venues to local business people since huge amounts are budgeted (Parker, 1998). The SCMP seems to be the Western newspaper of choice for hotel restaurant advertising.

CONCLUSION

Restaurant advertising in the Hong Kong English and Chinese language press has seen quite some changes over the past three decades. More advertisements were introduced in the eighties, the consumerism years, and the late nineties because of an economic slowdown. Coupons and discounts and the mention of price were more prevalent in the Chinese language press, which denoted that the local Hong Kong population is price-conscious. Set meals and buffet were the two service styles most advertised in Hong Kong's newspapers.

As expected, the Chinese language press' main focus of advertisements was on Chinese restaurants, but other kinds of restaurants were introduced in the eighties while the English language press was more diversified reflecting its diversity of readership.

The study indicates that there is a clear distinction between restaurant advertising in Hong Kong's English and Chinese language newspapers. Advertising to the restaurant's target market should be the main reason for a restaurateur while selecting a newspaper for placing advertisement, meaning the closest match between readership and potential restaurant guest. Since only two of the twenty local newspapers are English language the choice between Chinese language newspapers, the 18 remaining, is more difficult.

Further study of the wording of the advertisements is recommended, as well as a comparison to other major metropolitan area newspaper restaurant advertisements.

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LEADERSHIP IN HOSPITALITY EDUCATION AND PRACTICE: AN EXAMINATION OF ORGANIZATIONAL PROCESSES AND STYLES OF LEADERSHIP BEHAVIOR

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ABSTRACT

The academy and hospitality industry are a major part of a somewhat distrusting people-oriented society. Ethics and integrity are but two leadership traits that are a must if leaders want to regain the public's trust and confidence. Mike O'Neal, president of Oklahoma Christian University appointed an ethics ombudsman because school leaders believe that "the most important asset of this university and its leadership is trust, (Hinton, 2004, p. D2). It is probably safe to say that most universities and their leadership would consider trust, garnered through ethical and honest conduct, as an important asset. This paper discusses the leadership role, and seeks to identify what hospitality educators and industry professionals deem to be their personal leadership approach by categorizing their trait responses into a frame of four leadership styles.

Key Words: leadership; structural, human resource, political, and symbolic leader.

INTRODUCTION

The lack of effective leadership has led to the downfall of several major corporations (Brenner, 2003), as well as an examination of the questionable actions of administrators at several colleges and universities (Altbach, 2004). These scandals have left government officials, investors, contributors and the public skeptical about corporate and academic leadership. Competent, ethical and responsible leadership in today's academic and business communities is becoming more of an issue as the world progresses into the 21st Century.

Leadership ineffectiveness and leaders' roles continue to make headlines as some executives are being brought to justice for their previous leadership actions (Hays, 2004). Over the past years non-profit corporations representing higher education, have encountered their fair share of ineffective leadership and scandalous circumstances (Strescino, 2001; Patton, 1999). In her article "A question of TRUST: Scandals fuel public distrust of leadership," Carla Hinton addresses the issue of how the public has grown distrustful of leaders over the past several years. When there is some assurance or reliance that established laws will "hold government and other institutions accountable" only then will society be able to trust leaders in their various leadership roles (Hinton, 2004, p. D1).

Understanding leadership traits and their importance in a leadership role begins with a proper education. As such, it is important and imperative that hospitality educators emphasize trust, integrity, and ethical conduct as primary leadership traits and disseminate the qualities needed for tomorrow's leaders in today's classrooms. Furthermore, industry professionals must also exemplify responsible leadership characteristics, and be diligent leaders by example to the young professionals fresh from the halls of higher education. The professorate and the professionals are the people who are responsible to disseminate the message as it relates to honesty, integrity, competence, and other credible characteristics of leadership. As Kouzes and Posner posited, the *Foundation of Leadership is Credibility and the First Law of Credibility is*, "If you don't believe in the messenger, you won't believe the message" (Kouzes & Posner 2002, p. 33).

Study purpose

The purpose of this study is to offer participants an opportunity to examine their knowledge of leadership behavior and attitude toward leadership roles, and to determine with which model style of leadership he or she is most aligned.

LITERATURE REVIEW

This literature review will define and discuss the styles or frames of leadership as well as the aspects of leadership characteristics and organization. The literature also identifies the differences between a manager or supervisor and a leader who exhibits leadership capabilities. This research report will also explore the expected and unexpected qualities of inspirational leaders. Most importantly the literature will review how members of the professorate can exemplify leadership traits and exercise leadership qualities while teaching business and hospitality leaders of the future.

Leadership

Style can be considered as a person's inner being that allows him or her to approach leadership in an individualistic manner. In their book "Reframing Organizations" Bolman and Deal (1991), discuss leadership styles as

frames within a *Four Framework Approach* to effective leadership as a means for the gathering of facts, to increase understanding, and to ascertain how best to solve problems. Bolman and Deal suggest that leaders, academicians and practitioners, exhibit certain leadership behaviors as one of four styles within a framework approach to making leadership decisions and making sense of organization. These four styles or frames as they are referred to in the book are: Structural, Human Resource, Political, and Symbolic. These four frames are defined by Bolman and Deal (1991) in part as:

- **Structural** leaders are architects. They are more inclined to be designers and analytical in their approach to leadership. They tend to have a more developed approach to management and leadership, being rational, logical, and factually oriented. Such leaders like to “develop structure that best fit organizational purposes and environmental demands” and to “emphasize the importance of formal roles and relationships” (Bolman, 1991, pp. 9 & 15).
- **Human Resource** leaders tend to be supportive of others and act as a catalyst and sometimes servant. They emphasize the importance of people, and believe in interpersonal relationships, advocacy, motivation, empowerment, and teamwork participation. “They focus on ways to develop a better fit between people’s needs, skills, and values, on the one hand, and their formal roles and relationships, on the other” (Bolman, 1991, p. 9).
- **Political** leaders also tend to be advocates, however they are also fighters for their cause, goals and objectives. This style of leadership focuses on a distribution of power and interest in order to build relationships and networks with others who can assist or help them form a coalition. Such leaders realize that bargaining, coercion, compromise and negotiation are all a part of their daily routine. Some tend to have a Machiavellian style to their leadership approach.
- **Symbolic** leaders rely on their charisma to inspire others and communicate their vision. They present themselves more as a prophet, a symbol, and do not see themselves as vulnerable or in danger of failure. Their platform, be it the office or classroom, is like a stage where a leader plays a certain role that relies on images, luck or drama to give impressions, tell stories, and frame experiences in an effort to give hope and meaning to their audience.

There is no one leadership style that is any better than another. It fully depends on the type of job a leader has, and what situations the individual is faced with when called upon to make leadership decisions. Take for instance some different perspectives on how to improve schools in America. Depending on who is being questioned about their perspective on education, the response could be that American schools are failing, or that schools today are doing okay, or that the educational system is functioning successfully as expected. If you ask these same individuals how they would make schools better, assuming improvement was needed, you might get a human resource practitioner stating that more emphasis needs to be placed on continuing education, practical training and a sustained interpersonal relationship between administration and faculty. However, a response from a structural leader might convey a message such as “we need longer school days, increased accountability, and more systematic approaches to the evaluation of teachers and administrators,” (Bolman, 1991, p. 11). In academia, a hospitality and tourism program may be a department within a school or a school within a college. The program is situated, yet the leadership role will be similar and different in its struggle to make the program more effective. The leadership approach to organization and goal objective will be similar with regard to retention, enrollment growth, and other educational issues, but different because of program size, budgets, individual faculty needs, and how the department chair or school director envisions the strengths and weaknesses of their faculty and administration support. In dealing with the broad spectrum of personalities coming from administrators and faculty members, inclusive of their emotions, biases and prejudices, a program leader must also have a expansive disposition as well as “the wisdom to match frames [styles] to situations” and individuals (Bolman, 1991, p. 12). Therefore, an effective leader must maintain an open mind and be able to employ different frames, ideologies, and logics while remaining flexible to change and commitment.

Leadership

The term leadership has many different meanings to many different people. I consider *leadership* to be a very personal and unique quality that earns the respect and admiration of those individuals who must, or choose to, follow a leader. If you put respect and admiration aside and focus on reverence and charisma, you might consider leadership to be the inducement of others to act according to the wishes of the charismatic leader, (Gardner, 1986; Fisher and Koch, 1996).

- “Leadership is about articulating visions, embodying values, and creating the environment within which things can be accomplished” (Richards & Engle, 1986, p.206).
- “Leadership is a process of giving purpose (meaningful direction) to collective effort, and causing willing effort to be expended to achieve purpose” (Jacobs & Jaques, 1990, p. 281).
- “Leadership is a relationship and that relationship is one of service to a purpose and service to people” (Kouzes and Posner, 2002, p.27).
- “Leadership is the process of influencing others to understand and agree about what needs to be done and how it can be done effectively, and the process of facilitation individual and collective efforts to accomplish the shared objectives” (Yukl, 2002, p.7).

Generally stated, leadership is the process through which one member of a group influences other group members toward the attainment of specific group goals. Therefore, a leader has followers who will work together in order to fulfill a set of goals and objectives. That being the case, leadership is a part of the daily foundation that keeps an organization moving forward in a creative and responsive manner. Leadership is also the embodiment of an individual who has an established set of morals, and is not afraid to display them or use them in making leadership decisions for the betterment of others. In a leadership role, s/he must be able to present a realistically competent and confident persona that will engage others in the direction of a common cause. The leader should also be someone who is humble and yet a person of strong emotions, who accepts responsibility, is not afraid to take risks, and does not believe in failure. My personal theory about failure is that a mistake is only a failure if you do not learn anything from the mistake, and cannot turn the mistake into a positive experience. Since one of the traits of leadership is risk taking, it is fair to say that a leader cannot take risks without making a mistake now and then. That being said, it would seem to this author that a leader with integrity would take responsibility for their mistake, learn from it, and where possible turn it around into a positive action. Any and all of the leadership characteristics or styles of behavior mentioned in this paragraph can be applied in and out of the classroom.

No matter how people view others as leaders, a leader should possess an innate amount of leadership traits in order to effect positive change and to guide and direct others. In a leadership role s/he must possess and effectively communicate his/her vision, be competent and ethical, have sound values, be a good listener, and be able to adapt to the environment. Through communication, a leader will inspire others to be willing followers. These followers will be students who follow the teaching and advice of the educator as leader, and the educator as well who is a follower of the program chair or director, willing to achieve the tasks necessary to accomplish the goals and objectives of the program. In general, it is necessary that a leader have the skills and expertise to make positive changes in a corporate setting, academic classroom, or within their community in general. In a leadership role a leader can be any of “those individual citizens who are actively engaged in making a positive difference in the society, (W. K. Kellogg Foundation, 2000).

Inclusive of having the necessary traits to be a competent leader, *exemplary leadership* also requires that those in leadership roles observe certain standards. In their book “Leadership the Challenge” Kouzes and Posner refer to the “Five Practices Of Exemplary Leadership” as, 1) model the way, 2) inspire a shared vision, 3) challenge the process, 4) enable others to act, and 5) encourage the heart (Kouzes & Posner, 2002, p.13). These leadership practices are what their research found constituents expected of their leaders. These five practices of leadership should be seized by professors as well, and performed in their daily academic capacity. As educators, faculty members should lead by example and be model citizens and professionals for all students. In today’s competitive market, academicians as leaders need to step outside of the realm of strictly theoretical dissemination. Theory is great, but will not always answer or fit with all circumstances in real world situations. There is nothing wrong with a professor going beyond theory by *sharing a vision*, or *challenging* the theory, or *enabling students to act* and *encouraging their hearts* to share professional work experiences, thoughts or ideas that hopefully will bring about a collaborative atmosphere of understanding and learning. Therefore, it is important for professors as leaders to maintain an active practical learning environment so they can enhance the students’ understanding of the theory and open up the students’ mind by sharing visions of knowledge and trends for the future. For the hospitality academician an active learning environment can be maintained through an active leadership role with industry organizations and practitioners. By practicing leadership both in and out of the classroom, educators can benefit the students and empower them to achieve the objectives of the course (Pike, 1994). Enabling students to act as leaders even if only through a collaborative learning environment can best be summed-up by a famous Chinese philosopher and teacher who said, “[What] I hear, I forget; [What] I see, I remember; but [What] I do, I understand” (Confucius, 551 – 479 B.C.). The quickest way to un-encourage the heart or un-inspire students is what Pick refers to as the “five ways to squelch motivation”, which are: “1) have little personal contact, 2) get participants in a passive mood and keep them there, 3) assume the class will apply what it is taught, 4) be quick to criticize, and 5) make participants [students] feel stupid for asking questions in class” (Pick, 1994, p.30). Success does not come easy whether it is in one’s studies or profession, which is why professors should “encourage the heart” by showing students that they care about them and are truly concerned as to whether or not they understand and learn the subject matter.

Continuing Education

There is an old adage that states “you learn something new everyday.” In following that line of thinking, it is important to continue to expand one’s knowledge. An important consideration in any leadership role is continuing education, (Bennis, 1999). Concerned leaders at all levels must require their schools and departments within colleges, as well as corporate organizations, to set aside locations, times, and supportive means “whereby members have an opportunity to mix and mingle, not only with their colleagues but also with people who are invited in from the outside” (Bennis, 1999, p. 5). Learning opportunities are everywhere, therefore peers from inside and outside of organizations must be brought together to exchange ideas and brainstorm. By allowing for an interchange of ideas and encouraging the sharing of

“intellectual capital” in a fulfilling environment, leaders can improve existing situations and demonstrate concern for the personal growth of students and subordinates (Bennis, 1999).

Educators have the abilities, means and responsibility to emphasize the importance of continuing education for the purpose of continued improvement of the minds, skills and attitudes of the future leaders of our world. Through continuing education via conferences, presentations and research, educators and industry leaders stay abreast of changing times with the hopes of improving their teaching techniques, research methods, employee relations and other decision making abilities. However, continuing education is not limited to conferences, conventions or seminars, but also includes faculty sabbaticals where hands-on experience and new knowledge can be returned to the classroom to be shared with the student leaders of tomorrow. These competencies must exist in all leaders, but even more so in hospitality educators and leaders who must lead by example in educating and training tomorrow’s educators and leaders. The idea of continual study is not new.

- “What is the end of study? Let me know.”

Shakespeare, *Love’s Labour’s Lost*

METHODOLOGY

Population and Data Collection

The population used in this study was composed of a select number of 700 industry practitioners and academicians from 2- and 4-year colleges and universities that offer hospitality programs. The sample selected was drawn from a current membership list obtained from the Council on Hotel, Restaurant, and Institutional Education. This study was pilot tested by educators and practitioners involved in the hospitality industry, to determine their perception of leadership roles and to examine their personal leadership qualities. A previous related study proved beneficial in determining educators’ and practitioners’ knowledge of leadership traits, as well as some personal leadership qualities of educators and practitioners. The previous study was helpful in the redesigning of the instrument that was used in this study.

Of the 700 surveyed through e-mail, there were 86 (12.3%) mail delivery failures, 14 (.02%) automatic returns because respondent was out of the office during the survey period, 3 submission were returned totally incomplete, 9 were not able to open the link or cut and paste the link in order to respond, and 18 (3%) submissions were deleted due to improper completion of the instrument. The survey resulted in an actual population of 570 potential respondents. The usable responses were 146, giving an actual effective response rate of 25.6 percent. The collected data was analyzed using the Statistical Package for the Social Sciences, Windows Version 11.5 (SPSS 11.5). The procedure used was descriptive statistics, which included frequencies, mean score and standard deviations, in addition to factor analysis.

Survey Instrument

A set of 13 leadership related questions was presented to survey participants via an e-mail requesting their participation and asking that a completed instrument be returned via a web site link. The final survey questionnaire was prepared by the researcher based upon a pretesting and pilot study of the instrument, as well as literature reviews, the purpose of the research study, and the results of a previous related survey and study. Content validity for measuring the various aspects of the instrument was confirmed by obtaining opinions and expert judgment from professors and colleagues from the academic community at large.

Section one of the instrument sought to have each participant answer questions pertaining to the *Four Framework Approach* as presented by Bolman and Deal (1991), which discusses leadership styles as models leading to leadership behavior and organization. Respondents were given 13 ranking style questions and were asked to use an applicable response on how they viewed various obligations, approaches to situations, and how colleagues would observe them in a leadership capacity. Each question required the respondent to rank himself or herself from: 1 = most appropriate, 2 = appropriate, 3 = somewhat appropriate and 4 = least appropriate. Section two of the questionnaire was five questions designed to obtain a yes or no response to professional information regarding their career as an academician or industry practitioner. It also sought to determine if any of the respondents had previously held a leadership position or would consider accepting a leadership role. The third and final section of the questionnaire was demographically oriented. It consists of two select multiple choice questions asking the participant to identify their gender and highest level of education attained.

Analysis of Data

The Principle Component Analysis was used to determine the underlying dimensions of the responses to the general questions about leaders’ characteristics, as well as the qualities needed in a leadership role. In order to determine the underlying dimensions, factors based on the Latent Root Criterion (Eigenvalues > 1), Total Variance Explained, and

VARIMAX (orthogonal) Rotated Component Matrix were determined using the SPSS analysis program.

Table 1
Rotated Component Matrix (a)

	Component		
	1	2	3
Q1D	.797		
Q1B	-.779		
Q3D	.687		
Q6D		.859	
Q6B		-.787	
Q3A			.724
Q12B			-.658
Q13A			.651

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization a Rotation converged in 4 iterations.

Eigenvalues 1.939 1.483 1.355
 Percentage of Variance Explained 24.243 18.535 16.935
 Cumulative % of Variance Explained 24.243 42.778 59.714
 Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA): .549
 Bartlett's Test of Sphericity: Approximate Chi-Square: 104.724 df: 28 Sig.: .0001

The Scree Test Criterion was used to show the latent roots (Eigenvalues) criterion of greater than one (1) for the factors. Hair, Anderson, Tatham, and Black (1998) suggested that for a sample size of 50, the factor loading values considered significant must be greater than $\pm .40$ when interpreting the factor matrix of loadings. With respect to the general questions about leaders characteristics, as well as the qualities needed in a leadership role (Table 1) the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA) was .549. The (KMO) Measure of Sampling Adequacy was used to determine the appropriateness of applying factor analysis. The Bartlett's Test of Sphericity value (Chi-Square) was 104.724, significant at $p = .0001$ which showed a significant correlation among some of the variables. The factors were derived with Eigenvalues of 1.939, 1.483 and 1.355 respectively, which accounted for 59.714 percent of the total variance.

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RETENTION FACTORS OF HOURLY EMPLOYEES IN THE CASUAL DINING RESTAURANT SEGMENT

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ABSTRACT

Hourly employee retention has been a major area of concern for casual dining restaurant operators. The current study employed a self-administered questionnaire asking 120 casual dining restaurant employees to rate the importance of and their actual experience with 21 employment characteristics of their job. The findings revealed that the most important employment characteristics were flexible and consistent working hours, and introductory training. The study showed statistically significant differences between the level of importance and actual experience attached to 19 employment characteristics, which could explain the high turnover and low retention of employees in the industry. Implications for management are discussed.

Key Words: employee retention, casual dining restaurant industry

INTRODUCTION

The hospitality industry has traditionally been plagued by extremely high rates of employment turnover, especially among hourly employees (Pizam & Thornburg, 2000). One of the challenges for managers in foodservice is to lower the turnover rates and improve the retention of their hourly employees. Retention in the hospitality industry relates to keeping productive employees within the company (Tesone, 2004).

The restaurant industry's turnover rate was 113% for 2002 (Berta, 2004). Turnover rates tend to decrease in the various segments of the restaurant industry as the check averages rise. The quick service segment had the lowest check average per guest and had the highest turnover rate in 2002 (138%) and fine dining which has the highest average guest check also had the lowest turnover in the industry (82%). Casual dining restaurants fall between the two extremes in check averages and turnover rates. The casual dining turnover rate for 2002 was 110% (Berta, 2004).

The restaurant industry is a fast growing segment of the U.S. economy. The National Restaurant Association predicts that 2004 will see \$440.1 billion in sales, over \$1.2 billion a day. The industry will also employ over 12 million workers this year making it the largest private sector employer in the U.S. (National Restaurant Association, 2003).

The current study reviews past research regarding factors that contribute to turnover and retention factors in the restaurant industry. The current research concentrates on the casual dining segment of the restaurant industry. The current study will help provide answers to the question of why employees stay and what would cause them to voluntarily leave a casual dining restaurant location. Increasing retention will effectively reduce turnover costs and create a higher level of guest service (Pizam & Thornburg, 2000).

The current study uses a quantitative survey administered at casual dining restaurants in Central Florida. Hourly employees represented both back of the house and front of the house in these restaurants. The purpose of the survey was to measure the most important factors in retention for hourly employees in the casual dining segment. The results will give guidelines to restaurant managers and owners as to what will increase retention rates and keep employees there.

LITERATURE REVIEW

Casual Dining

The current study focuses on retention factors specifically in the casual dining segment of the restaurant industry. The casual dining restaurant segment is categorized as moderate-upscale dining. It focuses on themes in menu, service and décor. These are high energy and active workplaces that require a knowledgeable staff. New menu items and products are introduced on a regular basis. They typically serve alcohol, and as of the late 1990's, casual dining restaurants had a guest check average between \$10 and \$20 (Muller, 2001).

The popularity of the casual dining restaurant came about in the U.S. during the 1980's. According to Muller (2001), the U.S. restaurant industry has evolved through various phases of business. The first phase of demand was in the 1920's for full service family restaurants such as Howard Johnson's and the independent restaurant. The second phase, which started in the 1960's, was through the dawn and growth of the fast food restaurant. Efficiency and timeliness became the driving factors in this restaurant segment. Casual dining became popular in the third phase of restaurant evolution. From the 1980's to 2000 there was a shift in consumer demand. Consumers continually demanded more choices and became more educated in the choices they were making. Restaurant patrons began wanting more variety. Thus, there was evolution of the American dining experience into a desire for "casual themed" restaurants, thus allowing a restaurant patron to choose a different cuisine and atmosphere everyday of the week (Muller, 2001). Some examples are T.G.I. Friday's (neighborhood bar theme), Olive Garden (Italian themed) and Red Lobster (seafood themed).

Retention and Turnover

Turnover in many segments of the hospitality industry is quite common and has been an accepted parameter of the industry (Prewitt, 2000). Industry leaders in hospitality accept the "turnover culture" as an unchangeable factor. This concept is based on a norm accepted by employees and management that turnover is an appropriate behavior and is inevitable. This concept is economically harmful to a company and it also prevents the building of a unified work environment (Iverson & Deery, 1997).

One critical reason for slowing down the turnover culture and encouraging employee retention is that the cost of turnover has been proven to be very expensive for hospitality enterprises. Turnover related costs for a restaurant may include: advertising, recruiting, orientation, training, and loss of profits due to a lack in productivity, as well as extra food waste and equipment breakage (Loret, 1995). Studies by the National Restaurant Association's Education Foundation have priced the average cost of turnover for the restaurant industry anywhere from \$1,800 to \$6,500 per hourly employee (Weisberg, 2004).

The major challenge facing hospitality employers is identifying what factors reduce turnover and thereby increase retention in the industry. Once these are identified, managers can address the issues and potentially reduce the amount of money spent on turnover. A study conducted in 2001 of the top 100 restaurant companies in the United States found that the restaurant industry loses an estimated \$4 billion in turnover expenses for hourly employees annually, with the turnover of management an additional \$454 million (Spector, 2003). Increasing employee retention can help eliminate some of these turnover costs.

Retention Factors in Hospitality

While retaining employees has proven to be a challenge for the hospitality industry, there have been efforts in previous studies to find the most important factors in increasing retention rates. A study of hourly attraction industry employees identified several factors that were important when deciding whether or not to search for another place of employment. This research was conducted on hourly employees of small and medium attraction facilities in the Central Florida area and found that the most important retention factors were, "associated with intrinsic fulfillment and working conditions that were not necessarily associated with monetary rewards," (Milman, 2001, pg. 50). These factors predicting retention were: consistent working hours, clear job responsibilities, performance reviews, retirement plans, available day care, and convenient travel to work (Milman, 2001).

Similarly, Milman and Ricci (2004) conducted research on retention among hourly employees from small and medium-sized hotels in the Southeastern region of the U.S. Again, intrinsic fulfillment, not monetary rewards were listed as the important motivating factors in employee retention. Self-fulfillment, working conditions, and a clear sense of job responsibilities appeared as the predictors of employment retention from this research.

In the foodservice industry, DiPietro and Milman (in press), used a similar approach in order to measure factors of employee retention in the quick service restaurant segment. As previously stated, the quick service sector has the lowest ticket average per guest and the highest turnover throughout the restaurant industry at 138% (Berta, 2004). The quick service segment typically has a younger workforce as well. In the DiPietro and Milman (in press) study, 49.3% of the sample were 18 years old or under. Employees from 19-25 years made up 29.8% of the respondents. The costs of the quick service industry's turnover alone are estimated to be over \$3.4 billion a year (Prewitt, 2000).

In the quick service restaurant industry study, there were gaps found between what employees expected a workplace to provide and what was actually experienced by those employees on the job. The largest gaps occurred between the expectations and experience received in performance reviews, consistent working hours, hourly wage, and humane treatment of employees. Consistent working hours was an important factor found in all three employee retention studies.

Since all hourly employees studied relied on consistent working hours to provide consistent pay checks, this factor was rated as important to them (DiPietro & Milman, in press).

Purpose of Study

The purpose of this study is to determine what factors hourly employees of casual dining restaurants consider important in choosing and staying with a place of employment. Through identifying these factors in predicting retention, industry leaders and researchers will be given the keys to increasing hourly employee retention. By finding ways to raise retention, turnover rates and thereby total turnover costs will decrease.

METHODOLOGY

The current study was conducted by sampling hourly employees of casual dining restaurants in the Central Florida area. The surveys were completed during the months of September and October of 2004. A total of 360 surveys were distributed to a convenience sample of twelve casual dining restaurants in the Central Florida area. The number of completed survey responses totaled 120 to yield a response rate of 33.33%. Those who completed the surveys represent hourly employees from ten different casual dining chain restaurants and two independently owned casual dining restaurants.

The questionnaire used in the study was self-administered by the employees. It was a modified questionnaire from previous studies in employee retention for the hotel, theme park, and quick service restaurant industries (DiPietro & Milman, in press; Milman, 2003; Milman & Ricci, 2004; Ricci & Milman, 2003).

Three dependent variables were used in order to predict retention. These were based on survey questions pertaining to the respondents' level of satisfaction with their current job, their likelihood to refer a friend or family member to their current place of employment, and likelihood to remain at their current workplace.

Demographic information was gathered related to: gender, age range, education, marital status, and number of dependents. Respondents were also asked to answer questions pertaining to their previous and current employment. These questions consisted of: length of tenure with current employer, current area of work in the restaurant, types of previous employment, how the employee found their current job and what factors attracted them to their current place of employment. Employees were also asked to rate on a 1 to 5 scale how strongly they agreed or disagreed with certain statements about their current employment (1=strongly disagree, 5=strongly agree). On a separate, but similar scale, the questionnaire asked what influence certain variables would have on attracting them to another place of employment.

The dependent variables were evaluated against the retention variables of the study in order to identify the factors which help to predict retention. From the statistical analysis using SPSS (version 11.5), results were analyzed to determine key factors in employee retention in the casual dining restaurant segment.

RESULTS

Demographic Characteristics

The demographic results of the sample of casual dining hourly employees show a primarily female sample (53.8%), compared to males (46.2%). The median age of respondents was 19-25 years of age, representing 56.4% of the respondents. The next largest age range represented was those 26-30 years (23.1%). The other age groups were much smaller: 18 or under (4.3%), 31-35 (5.1%), 36-40 (6.0%), 41-50 (5.1%). The educational attainment level of the respondents showed that most had experienced "some college" (43.9%). Most of the respondents were single (71.6%) and had no dependents (63.5%).

Job Tenure and Responsibilities

The survey results show the median hours worked per week by the respondents was 30 hours. The median length of tenure for the sample was found to be 1-2 years. Those who had job tenure in the categories of 6-12 months and 1-2 years each made up 21% of respondents. Other categories of job tenure were: less than 3 months (5.9%), 3-6 months (11.8%), 2-4 years (17.6%), 4-6 years (9.2%), and over 6 years (13.4%). With less than half (40.2%) of the respondents having worked over two years at their current place of employment, it is clear that employee retention is still a problem in this sector of the restaurant industry.

All hourly employees working in any area of the casual dining restaurant were eligible to participate in the study. Almost three-quarters (73.9%) of the respondents reported that they spent the majority of their shifts at work in the "front

of the house". This area of the restaurant includes but is not limited to servers, hosts, and bartenders. Other areas of the casual dining restaurants where hourly employees worked included take out or delivery (3.4%) and kitchen (20.2%).

Job Characteristics of Hourly Casual Dining Employees

Respondents were asked how they learned of their current job. All choices that helped the employees find their current position were to be identified with multiple responses allowed. The most frequently identified source was "referral by another employee who works there" (39%). The next most frequent response was "just dropped by looking for a job" (35.6%). The "other" choice (10.2%) included: transferring from another location and knowing a former employee of the establishment. See Table 1 for additional responses.

Respondents were also asked to identify all characteristics which attracted them to their current place of employment. The results show that majority of respondents identified a flexible schedule as attracting them to their current job (52.9%). The second most frequent attracting motivator was pay level (42%) which was closely followed by interaction with people (39.5%). Other characteristics which attracted respondents to their job included: ease of commute/location (30.3%), reputation of individual restaurant (28.6%), reputation of restaurant brand (27.7%), having friends or family members who work at the restaurant (25.2%), job duties (20.2%), employee benefits (16.8%), and other (7.6%). Some of the "other" comments included: a chance for advancement, the best option for a new job, and wanting to work in and help develop a new restaurant (Table 2).

Table 1
Sources That Helped Respondents Learn About Their Current Job

How Did You Learn About The Job?	%
Referral by another employee who works there	39%
Just dropped by looking for a job	35.6%
Through other members of my community	7.6%
Newspaper/magazine ads	7.6%
School/university recruitment	1.7%
Restaurant marquee sign	1.7%
Internet general job search	.8%
Community job fair	.8%
Web site of this restaurant/brand	0%
Other	10.2%

Note: Percentages add up to more than 100% due to multiple responses. N=120

Table 2
Characteristics that Attracted the Respondent to Their Current Job

Employment Characteristic That Attracted You To Job	%
Flexible schedule	52.9%
Pay level	42%
Interaction with people	39.5%
Ease of commute/location	30.3%
Reputation of this individual restaurant	28.6%
Reputation of this restaurant brand	27.7%
Friends or family members work at the restaurant	25.2%
Employee working environment	23.5%
Job duties	20.2%
Employee benefits	16.8%
Other	7.6%

Note: Percentages add up to more than 100% due to multiple responses. N=120

Evaluation of Current Employment Experience

Twenty-one employment characteristics were identified on the survey questionnaire. Respondents were asked to

rate each characteristic on its perceived importance and on the actual experience the respondent has had with that characteristic. When identifying perceived importance a rating of “1” indicated “unimportant” and a “5” indicated “very important”. In the column denoting actual experience, the “1” rating was for a “poor” experience and the “5” acknowledged an “excellent” experience.

The results displayed in Table 3 show the characteristics rated most important in perceived value were: flexible working hours (mean=4.48), consistent working hours (mean=4.41), introductory training (mean=4.39), humane approach to employees (mean=4.39) and clear information on job tasks and responsibilities (mean=4.34). Least important in employees’ perceived values were: hourly wage (mean=3.89), crew uniforms (mean=3.71), health benefits for family (mean=3.57), direct deposit of paycheck (mean=3.52), and retirement plan (mean=3.26).

Table 3
Comparison Between Level of Importance and Actual Experience of Respondents’ Employment Characteristics

Employment Characteristic	Level of Importance		Actual Experience		T-Test		
	Mean	Standard Deviation	Mean	Standard Deviation	T Value	Sig.	Df
1. Flexible working hours	4.48	0.77	3.96	1.06	5.41	.000	105
2. Consistent working hours	4.41	0.90	3.66	1.06	6.82	.000	103
3. Introductory training	4.39	0.96	3.51	1.17	6.96	.000	106
4. Humane approach to employees	4.35	0.95	3.54	1.07	7.28	.000	105
5. Clear information on job	4.34	0.88	3.73	0.99	5.52	.000	106
6. Nice people to work with	4.29	0.95	3.98	1.01	3.06	.003	104
7. Fun and challenging job	4.23	0.79	3.52	0.98	7.11	.000	103
8. Ongoing training	4.13	0.97	3.26	1.07	7.04	.000	104
9. Convenient travel to work	4.02	1.04	3.75	1.21	2.37	.020	103
10. Advancement opportunities	4.02	1.08	3.10	1.25	6.15	.000	105
11. Employee meals	4.01	1.08	3.58	1.25	3.56	.000	104
12. Paid vacation	3.99	1.23	2.99	1.54	6.55	.000	103
13. Health benefits for me	3.99	1.23	3.13	1.35	6.57	.000	103
14. Performance reviews	3.94	1.25	3.10	1.33	5.68	.000	104
15. Company policies	3.91	1.02	3.74	1.13	1.64	.103	103
16. Hourly wage	3.89	1.26	3.15	1.22	5.30	.000	102
17. Crew uniforms	3.71	1.18	3.40	1.22	2.99	.003	105
18. Health benefits for family	3.57	1.43	2.76	1.40	5.27	.000	102
19. Direct Deposit of paycheck	3.52	1.37	3.65	1.43	-1.06	.293	103
20. Retirement plan	3.26	1.42	2.49	1.34	4.82	.000	103
21. Other	3.83	1.34	2.94	1.39	2.25	.039	17

Note: Level of Importance: 1 to 5 scale: “1”=Unimportant, “3”=Somewhat Important, “5”=Very Important
Actual Experience: 1 to 5 scale: “1”=Poor, “3”=Good, “5”=Excellent
N=120

Paired sample t-tests were used to determine whether there were significant differences between employees' perceptions of importance and their actual experience regarding the employment characteristics. Each of the employment characteristics provided showed significant difference ($p < .05$) between importance and actual experience with the exception of two characteristics, company policies ($p = .103$) and direct deposit of paycheck ($p = .293$). The remaining characteristics have statistically significant gaps between what hourly employees of casual dining restaurants rate as important in their employment and what they are actually experiencing on the job.

Job Retention Indicators

Three dependent variables were used in this research: level of satisfaction with their current job, likelihood to refer a friend or family member to their current place of employment, and their likelihood to remain with their current job for the next 6 months, to predict the retention of hourly employees in the casual dining industry. All three questions asked for responses based on a 5 point scale with 1= "very unlikely/dissatisfied and 5= "very likely/satisfied".

Regarding the level of job satisfaction with their current job, it was found that a majority of the sample responded to being "satisfied" with their current job (52.3%). The remaining ratings were: "very satisfied" (16.5%), "neither dissatisfied nor satisfied" (22.9%), "dissatisfied" (6.4%), and "very dissatisfied" (1.8%).

Responses to "likelihood to refer a friend or family member to your current employer" were distributed more evenly throughout the scale. The results were as follows: very unlikely (10.3%), unlikely (8.6%), somewhat unlikely (25%), likely (28.4%), and very likely (27.6%).

In answering the question "how likely are you to remain with your current employer for the next six months" the answers were: very unlikely (6.5%), unlikely (7.5%), somewhat likely (15.9%), likely (20.6%), and very likely (49.5%).

Employment Characteristics That Contribute to Turnover

The questionnaire identified a list of characteristics that may attract employees to another company, and away from their current place of employment. Respondents were asked to rate these characteristics on a 1-5 scale ("1"=no value, "5"=very high value). The characteristics most likely to attract employees to another place of employment were: better pay (mean=4.60), flexible working hours (mean=4.09), improved chance of promotion (mean=4.01), and more humane approach to employees (mean=3.90). Those characteristics which were least likely to attract employees to a new work place were: easier travel to work (mean=3.57), different management style (mean=3.46), better retirement plan (mean=3.42), and a larger organization with more resources (mean=3.39).

Predictors of Retention of Hourly Casual Dining Employees

Three step-wise multiple regressions were conducted to identify what factors would predict job satisfaction, and hence retention intent, in the casual dining restaurant industry. The three dependent variables that were used were "current level of satisfaction with their current job", "level of likelihood to refer a friend or a family member to their current employer", and "likelihood to remain in their current job for the next six months". The independent variables consisted of the following 77 variables: Respondent's current job responsibilities (1 variable), respondent's previous employment experience (5 variables), respondent's evaluation of current employment experience (9 variables), respondent's satisfaction with their current job (1 variable), likelihood to refer a friend or a family member to apply for a job at the restaurant the respondents worked for (1 variable), level of importance of employment characteristics (21 variables), actual experience regarding employment characteristics (21 variables), employment traits that would make employee move to another company (13 variables), and demographic characteristics (5 variables).

The results indicated that the following seven variables significantly affected respondents' level of satisfaction with their current employer, and the variance explained by the regression was 57%.

- I have a sense of fulfillment in the job
- I want to further my education while working here
- Actual experience of ongoing training
- Working here is fun
- Employee meals
- Quick service restaurant experience
- Attracted to work in another company by nicer people

The results for the second regression indicated that the following twelve variables significantly affected respondents' likelihood to remain with the current employer for the next 6 months, and the variance explained by the regression was 58.5%.

- I would like to find another job soon
- Length of time employed by current employer
- Actual experience: flexible working hours
- More humane (caring) approach to employees
- Actual experience: Ongoing training
- Actual experience: Advancement opportunities
- Larger organization with more resources
- Other hospitality experience
- Gender of respondent
- Actual experience: Nicer people to work with
- Sense of fulfillment
- I want to work somewhere else in the future

For the third regression the results indicated that the following eight variables significantly affected respondents' likelihood to refer a friend or family member to this job, and the variance explained by the regression was 48%.

- I would like to find another job soon
- Importance: Paid vacation
- My job responsibilities are very clear to me
- Improved consistency in working hours
- Gender of respondent
- Actual experience: Advancement opportunities
- Actual experience: Retirement plan
- Importance: Introductory training

DISCUSSION AND IMPLICATION FOR PRACTITIONERS

Since there was no single variable found as a predictor in all three regressions, leaders in the casual dining restaurant industry need to consider a variety of factors when attempting to increase hourly employee retention. The three predicting variables were not highly correlated enough to yield similar predictors that were statistically significant. This gives practitioners many areas to focus on in order to improve retention.

To help improve retention, practitioners could start with proper recruiting methods. As shown in Table 1, the majority of respondents found their current place of employment through a referral or by just dropping by and applying at the restaurant. What most attracted people to their current jobs were flexible schedules, pay level, and interaction with people. For practitioners of the casual dining restaurant industry, these results show that employees are currently using different methods for seeking out their jobs. Employee searches on the internet, in newspapers and job fairs are not as effective in hiring anymore as practitioners may expect.

Pay level appears as a factor that initially attracts employees, but it is not a factor that predicts retention of hourly employees in the casual dining industry. This finding is different than that found in the research on quick service restaurants, where pay did not attract employees initially, but was found to be a predictor of retention (DiPietro & Milman, in press). This could be due to the different way that hourly employees are paid in casual dining versus quick service. The lack of emphasis on pay level as a method of retention in the casual dining sector may have been influenced by the large amount of tipped employees working in the industry. For this study there were a large number of tipped employees in the sample since 73.9% of the respondents worked in the front of the house in their restaurants where most employees are paid primarily through tips.

The previous research on employee retention in the hotel, theme park, and quick service industries all identified consistency of hours as a predictor in retention (DiPietro & Milman, in press). In the current study, the casual dining restaurant segment does not find this factor as a predictor in retention. This gives evidence that practitioners in the casual dining restaurant industry need to consider the uniqueness of their industry. What may help retention in other areas of the hospitality industry may not work within casual dining.

The comparison of hourly employees' actual experience versus their rating of importance of 21 factors of employment resulted in only two characteristics not having a significant difference between level of importance and actual experience. These factors were company policies and direct deposit of paychecks. Factors such as introductory training, clear information on the job, a humane approach to employees, and flexible working hours are examples of factors that employees rated at a higher level of importance than they rated their actual experience. Clearly it can be seen here that

casual dining restaurant leaders need to identify which factors are most important to their employees. From there they can work on closing the gaps in their employee expectations and experiences and possibly help to increase retention in this industry.

CONCLUSION

Through the current study, there were many important findings for restaurant operators and practitioners. The most common source of locating hourly employees was through the referral of an employee who already worked for the restaurant. Respondents were most attracted to their current job by a flexible schedule, pay level, and interaction with people.

The list of employment characteristics where respondents were asked to rate their level of importance and their actual experience for each factor, resulted in only two factors not having a significant difference in their comparison. This shows that practitioners of casual dining restaurants do not have a good understanding of what is important to their employees and how it should be delivered in the actual job experience.

Better pay was listed as a factor in employees choosing their current employment and also the factor most likely to attract employees to a new job. Pay level was not listed as determinant in any of the three dependent variables however. Flexible working hours, improved chance of promotion, and a more humane approach to employees were also factors rated important in attracting hourly employees to a new place of employment.

These factors can be used in further research to develop retention plans for casual dining restaurants. Practitioners must take into account these factors when attempting to improve the retention of hourly employees. As discussed earlier, increasing retention in the casual dining restaurant segment will save money for restaurants from reduced recruiting practices and reduced turnover. Casual dining leaders need to identify those factors which are important to their hourly employees and find ways to deliver those aspects of employment effectively in order to decrease turnover costs and improve their employee retention rates.

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LEADER-MEMBER EXCHANGE (LMX) AND PSYCHOLOGICAL EMPOWERMENT:
A RESTAURANT EMPLOYEE CORRELATION STUDY

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ABSTRACT

This study identifies the level of relationship of LMX and psychological empowerment and selected demographics among quick-casual restaurant employees. Survey instruments include Spreitzer's 12-item psychological empowerment (1992) and LMX-7 (Graen & Uhl-Bien, 1995) as well as a demographic questionnaire. The study encompassed 173 employees from 20 restaurants in the continental US. The findings reveal that LMX was moderately high for all respondent subgroups. Psychological empowerment was found to have a two-factor structure and was moderately related to all demographic subgroups.

Key words: leader-member exchange, psychological empowerment

INTRODUCTION

Those employees who directly provide service for customers have an enormous influence on customers' perceptions of service quality and on customer satisfaction (Bitner, Booms & Tetreault, 1990). Lawler (2000) argues that the only true sustainable competitive advantage of an organization is its people, and that all organizational members need to be involved and active for the firm to succeed. The concept of employee empowerment is continuously receiving attention from scholars and practitioners alike (Donavan, 1994; Townsend & Gebhardt, 1997). The practice of employee empowerment helps individuals to be self-directed and entrusted with real responsibility for the processes and the outcomes (Zuidema & Kleiner, 1994). Empowered employees are most likely to be more productive, changeable and cooperative (Stone, 1992), and they view themselves as more effective in their work and are evaluated as more effective by their co-workers (Quinn & Spreitzer, 1997).

Deci, Connell, and Ryan, (1989) have maintained that managers have a vital effect on subordinates' experiences of empowerment. Leader-Member Exchange (LMX) (Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975) seeks to help explain the relationship between the leader and followers. In doing so, it proposes that leaders develop qualitatively different types of relationships with their employees. Since the introduction of LMX theory, a number of research studies have revealed that a high quality of LMX predicts a lower employee turnover (Cole, 1995), more positive performance evaluations (Cole, 1995) and greater organizational commitment (Mazibuko & Boshoff, 2003).

LITERATURE REVIEW

Leader-Member Exchange

In opposition to traditional leadership theories assuming that leaders indicate an average leadership style with all subordinates (Dunegan et al., 1992), Graen and his colleagues (Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975) approached leadership with a different perspective, suggesting that leaders develop an exchange relationship within vertical dyads during role making activities, assigning work functions among their subordinates accordingly. This approach suggests that leaders do not relate to all followers in the same manner. A number of researchers have found that LMX quality is positively associated with important organizational outcomes such as subordinate satisfaction (Graen, Novak, & Sommerkamp, 1982; Scandura & Graen, 1984), promotions (Schriesheim et al., 1999; Wakabayashi & Graen, Graen, & Graen, 1984), and ratings of member performance (Graen, Novak & Sommerkamp, 1982; Liden & Graen, 1980; Scandura & Graen, 1984).

With respect to the hospitality industry, a number of studies have been carried out to examine the relationship of LMX and a variety of organizational factors. Among these are those of Borchgrevink and Boster (1994), Testa (2002), Lam, 2003), and George and Hancer (2003).

Psychological Empowerment

Conger and Kanungo (1988) classified empowerment with two types of approaches: A relational approach of empowerment and a motivational approach of empowerment. They went on to define empowerment as “a process of enhancing feelings of self-efficacy among organizational members through the identification of conditions that foster powerlessness and through their removal by both formal organizational practices and informal techniques of providing efficacy information” (Conger & Kanungo, p.474).

Thomas and Velthouse (1990) conceptualized empowerment as multifaceted and that its essence cannot be captured by a single concept. The researchers described empowerment as increased intrinsic task motivation manifested in a set of four cognitions (impact, competence, meaningfulness and choice) reflecting an individual's orientation to his or her role. On the basis of Thomas and Velthouse's cognitive interpretation of empowerment, Spreitzer (1992) restated and validated a four-dimensional scale in order to measure the four defining elements, and replacing meaningfulness with meaning and substituting choice for self-determination. Spreitzer's four-dimensional scale has attracted organizational researchers in identifying psychological empowerment (i.e., Spreitzer, 1992, 1995; Fulford & Enz, 1995; Siegall & Gardner, 2000; Hancer & George, 2003).

Within the hospitality context there is a growing body of empowerment related research. This has included that by Bowen and Schneider (1985), Sparrowe, (1994), Fulford and Enz, (1995), Corsun and Enz, (1999), and Hancer and George (2003). The present study sought to add to this growing body of research through the examination of leader-member exchange and psychological empowerment as related to employees in a quick casual restaurant chain.

METHOD

Sample and Data Collection Procedure

Employees working in a quick-casual restaurant chain across United States were the targeted population of the study. The restaurant chain owns and operates as well as franchises two hundred sixteen restaurants in twenty-six states. Employees at the restaurants are cross-trained to perform multi-function jobs. Approximately 13% of all of the restaurants were targeted for the study. The restaurants were geographically dispersed.

The general managers/owners received a letter of support for the research from the corporate office and a cover letter individually signed by the researchers to explain the details and procedures of the survey. The general managers/owners were responsible for the distribution and collection of the questionnaires. Employees had the opportunity to complete or refuse to complete the instrument. The participants were instructed not to sign the survey instruments, to place the completed questionnaire in a sealed envelope, provided by the researchers, and to return the sealed envelope to the general manager/owner who would then put all the survey instruments in a self-addressed, stamped return envelope provided by the researchers. Instructions were given to the general managers or owners to mail the survey packets directly to the researcher's address to guarantee confidentiality of the participants.

Measures and Data Analysis

Leader-Member Exchange (LMX). The quality of Leader-Member-Exchange was identified utilizing the seven-item inventory ($\alpha = .90$) developed by Graen and Uhl-Bien (1995). The LMX-7 consists of seven items that characterize various aspects of the working relationship between the manager and the subordinate, including effectiveness of the working relationship, understanding of job problems and needs, recognition of potential, and willingness to support the other. Each item is arranged with five responses in a nominal frequency scale format. Response categories vary: such as (1) Rarely (2) Occasionally (3) Sometimes (4) Fairly Often (5) Very Often, or (1) None (2) Small (3) Moderate (4) High (5) Very High, etc. Higher scores represent higher quality exchange between the supervisor and the employee.

Psychological Empowerment. A twelve-item scale constructed and validated by Spreitzer (1992, 1995) was used to measure the level of psychological empowerment. The response format of the inventory was a 7-point Likert type ranging from 1 (Strongly disagree) to 7 (Strongly agree). Spreitzer (1992) explained psychological empowerment with four dimensions: (1) meaning ($\alpha = .81$), (2) competence ($\alpha = .76$), (3) self-determination ($\alpha = .85$), and (4) impact ($\alpha = .83$). Spreitzer (1996) further contended that each item loads on its appropriate factor and that the four dimensions contribute to an overall construct of empowerment.

Using the Spreitzer (1992) inventory, Fulford and Enz (1995, p.165) analyzed the results of a study of club employees. They employed varimax rotation of a principal component method to examine the integrity of the factor structure. The results showed that the dimensions of meaning and competence were distinct, which is consistent with Spreitzer's dimensions, however the dimensions of self-determination and impact collapsed into a single factor named

influence, different from those of Spreitzer. Consequently, the researchers identified the dimensions of psychological empowerment with three factors, including meaning ($\alpha = .80$), competence ($\alpha = .70$), and influence ($\alpha = .83$). Hancer and George (2003) also adopted Spreitzer's 12-item scale to identify the perception of empowerment of 798 non-supervisory workers in full-service restaurants. They also found 3 factors (meaning, competence and influence).

Demographic Characteristics. Demographic information of the restaurant employees was identified through the 6-item questionnaire developed by the researchers. The items include employee's gender, age, tenure with the current organization, job status and job function. Demographic information was sought to further analyze how different groups of employees perceive LMX and empowerment.

Analysis of Data. Statistical Package for Social Science (SPSS) 12th version was used to analyze the data with various statistical methods, including descriptive analysis, exploratory factor analysis, reliability test, and correlation analysis. Principal component analysis with varimax rotation was performed with the 12-item questionnaire about psychological empowerment and the 7-item inventory of LMX. T-test was used to determine the relationship of the selected demographics on LMX and psychological empowerment. The LMX score and the psychological empowerment score were calculated by averaging the response items.

RESULTS

Respondents

For the sample of 173 employees who participated in the study, 46.2% of respondents are female and 53.8% are male. The range of participant's age was from 15 years old to 67 years old. Of the 166 participating employees indicating age, the average age of the employees is 23.24 year. The average workweek was 27.32 hours. All respondents marking cashier are female and 88 % of the cooks are male. However, all of the employees are cross-trained and are expected to be able to work all positions. For the purpose of this study, all functions were collapsed into one category. Selected comparison demographics are demonstrated in Table 1.

Table 1.
Participant Characteristics and mean Scores for PE and LMX

Characteristic	N	Per Cent	PE	LMX
Gender				
Female	80	46.2	5.82	3.93
Male	93	53.8	5.79	4.05
Age				
20 years or less	87	50.3	5.73	3.87
More than 20 years	79	45.6	5.89	4.15
No response	7	4.1		
Tenure				
Less than 1 year	91	52.6	5.60**	3.84**
More than 1 year	75	43.3	6.07**	4.19**
No response	7	4.1		
Work Hours				
Less than 26 hours	84	48.5	5.72**	3.86**
More than 26 hours	89	51.5	5.88**	4.13**
Job Status				
Full time	62	35.8	5.65*	3.86**
Part time	111	64.2	6.08**	4.24**
Total	173	100	5.80	4.00

**Mean differences are significant at the 0.01 level (1-tailed).

*Mean differences are significant at the 0.05 level (1-tailed).

a. Possible range of PE: 1-7,

b. Possible range of LMX: 1-5

Mean scores of LMX and psychological empowerment are presented in terms of demographics in Table 1. T-tests were performed in order to examine the scores of LMX and psychological empowerment across demographically different sample groups. Gender and age were not statistically associated with differences in the mean scores of psychological

empowerment and LMX. Mean scores of psychological empowerment and LMX were different depending on employees' tenure in the current restaurant. Longer tenure employees have the higher mean scores of psychological empowerment and LMX. Employees who work more hours a week also tended to report higher mean scores of psychological empowerment and LMX. Full time employees marked higher scores of psychological empowerment and LMX. This result is consistent with the result of other studies for psychological empowerment (Fulford & Enz, 1995; Hancer & George, 2003).

Factor Analysis

Principal component analysis with varimax rotation was performed with the 12-item psychological empowerment instrument (Spreitzer, 1992) and the 7-item inventory LMX (Graen & Uhl-Bien, 1995).

Leader-Member Exchange. An initial factor analysis was performed with all the seven questions. Only one component was extracted and there was no rotated solution for a different factor structure. The scale identified had a high internal consistency ($\alpha = .902$). McMillan and Schumacher (1997) assert that factors with a Cronbach alpha of .65 or higher testify internal consistency.

Psychological Empowerment. Scales of psychological empowerment were computed for the 12-item questionnaire developed by Spreitzer (1992). Using the 12-item inventory, Fulford and Enz (1995, p.165) discovered that although meaning ($\alpha = .80$) and competence ($\alpha = .70$) dimensions each emerged as individual scales, the dimensions of self-determination and impact collapsed into a single factor, which they named influence ($\alpha = .83$) for the sample of service employees in private clubs. In the present study, Kaiser Criterion indicated that the 12-item psychological empowerment scale appeared as a two-factor structure rather than as a three-factor structure or a four-factor structure.

TABLE 2.
Factor analysis for Psychological Empowerment

Psychological Empowerment Scale	Factor 1 Influence	Factor 2 Attitude
12. I have a great deal of control over my job	.86	.12
10. I have influence over what happens in my work group	.83	.23
7. My opinion counts in the work group decision making	.79	.27
8. I have freedom in determining how to do my job	.79	.23
9. I have a chance to use personal initiative in my work	.75	.41
11. I decide on how to go about doing my work	.74	.20
5. I am confident about my ability to do my job	.09	.84
1. My work is important to me	.28	.84
4. My job is well within my scope of my abilities	.21	.76
3. I care about what I do on my job	.34	.76
6. I have mastered the skills to do my job	.18	.73
2. My job activities are meaningful to me	.42	.67
Eigenvalues	6.48	1.80
Percentage of Variance (%)	54.06	15.04
Cronbach Alpha Reliability	.91	.89

Table 2 shows, as did Fulford and Enz (1995), items 7 to 9 (self-determination) and items 10 to 12 (impact) were combined into a single factor and named influence. However, the present study found items 1 through 3 (meaning) and items 4 through 6 (competence) also emerged as a single factor. The combined factor was named "attitude", since the six items encompassing both meaning and competence seek to determine the feelings of employees toward the job and the self-belief that they possess the skills and abilities to do it well. This result concurs with Spreitzer's (1995) suggestion that more work is necessary on the discriminant validity of the four scales.

DISCUSSION

Findings and Implications

It is anticipated the results of this research will aid in further understanding the nature of service employees and their relationship with managers in a restaurant setting. Hospitality professionals as well as educators may take advantages of the current study both practically and theoretically. This research adds to the growing literature about LMX and empowerment, in a restaurant setting. The information generated can be also used in manager training programs when

discussing the effect of manager's relationship with subordinates on the perception of employees and directing the activities of employees.

This study is beneficial to continuing the discussion of the factor structure of psychological empowerment. The researchers adopted Spreitzer's 12-item scale (1992) to determine psychological empowerment. It has been found that the 12-item instrument consists of 4 factors (Spreitzer, 1995; Siegall & Gardner, 2000) or 3 factors (Fulford & Enz, 1995; Hancer & George, 2003). The present study identified two factors: attitude, the feelings of employees toward the job and their ability to do it, and influence representing, the feeling that "an individual's belief that he/she can affect or influence firm outcomes and decisions" (Fulford & Enz, p.168).

Limitations and Future Research

The number of individuals participating has limited this study. It is possible that a larger sample might have yielded a different result. The method of self-report used may result in a sample bias. The respondents may have reported level of feeling as they felt management might have wanted. Method of distribution may be an influence. Additional studies should be conducted with both similar and dissimilar groups to determine similarity to the present and previous studies. Additional study of the relationship between LMX and psychological would be beneficial. The two concepts might also be examined for relationship with other organizational outcomes.

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MUTI-GENERATIONAL MANAGEMENT IN HOSPITALITY: MEETING GEN Y'S EXPECTATIONS

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ABSTRACT

Multi-generational defines the hospitality workplace. Presently Gen Y hospitality managers are making their way into the work place. Because of the growth of the industry and the historical amount of turnover, they may be called upon to manage and/or move up the ranks *post haste*. Keeping them "on board" in this milieu would seem to be imperative. To some extent familiarity with their expectations may help these efforts. Accordingly, the purpose of this study was to examine the job expectations of hospitality students. Another was to compare their expectations to job satisfaction scores of managers. Lastly, to examine the dimensions that define job satisfaction by generation.

Key Words: Hospitality Management, Generation Y, Job Satisfaction

INTRODUCTION

Boomers. The post World War II climate set off the largest population boom in the history of the United States. Due to a remarkable increase in births, those born between 1946 and 1964 have been dubbed the *Baby Boomers*. The Boomer generation can be characterized by the increased role of women in the workplace, greater diversity, improved (universal) education, sustained economic impact, and a longer life expectancy (McCune, 1998). Because of their sheer size and make-up, the Boomers have changed society at every phase of their lives. First it was the diaper industry; next the schools. Presently it is the (anti-) aging industry and real-estate (Nayyar, 2002; Taylor, 2004; M. J. Weiss, 2002; Wellner & Fetto, 2001). Soon they will impact health care and end-of-life services (Francese, 2002; Salt, 2003).

Generation X. *Generation X* is the moniker applied to the generation born between 1965 and 1979 (Jochim, 1997). They have also been called *Baby Busters* due to the decline in the birth rate after the baby boom period. At times they have been characterized as slackers with very little work ethic – who do not care about themselves or their future. Compared to Boomers, Gen Xers may be more concerned about the quality of life, including the length of the work week. They don't mind working hard, but they see more to life than just working hard. Also, they want what is best (for themselves) – and they want it now. Many Gen Xers see themselves as free agents and entrepreneurial, and they value keeping themselves up to date and being lifelong learners

Generation Y. Much has been written about Generation Y - The Millennium Generation. Born between 1979 and 1994, the first wave of college grads is now entering the workforce; many more are soon to follow. Without a doubt increasing affluence has influenced these 60-80 million sons and daughters of the Boomers like no other. For instance, Gen Yers are expected to spend more than \$172 billion; of this amount, 15% will be spent on line (Wong, 2003).

Perhaps as a result of their situation as "Echo Boomers" they have also experienced notable social changes - like those in the traditional family structure. For example in two parent households, three in four Gen Yers had working moms (Neuborne & Kerwin, 1999). Also, the number of single parent families grew from approximately 3.4 million in 1970 to 12 million in 2000 (Fields & Casper, 2001). This generation was also the first to have been weaned on (home) computers, and symbiotically raised with incredible developments in technology. Fittingly, they have been christened the Internet Generation (Griffin, 1999). In addition to computers they have had a number of other high-tech gadgets at their disposal including the (Sony) Walkman, Nintendo/Play Station, and portable phones and pagers – e.g. Motorola flex pagers. Truly, they have grown up in a world where they control the communications process. Unlike their parents they don't have to go

to the library to find information; instant access has enabled them to get “everything-on-demand-anytime-anyplace” (Goldman, 1999).

The Hospitality Workplace. Multi-generational defines the hospitality workplace. Teens often find their first job at restaurants, hotels, clubs, etc. Similarly retirees often turn to these businesses to help augment their fixed incomes and/or to stay busy. On the whole, however, the hospitality workforce, and foodservice in particular, tends to be skewed toward younger workers. In fact only 7% of food preparation and service workers are 55 years of age or older (National Restaurant Association, 2003 April). According to the NRA (National Restaurant Association, 2003 April), the “typical” foodservice employee is: female; under 30 years of age; single; and part-time (on average 25.6 hrs/week).

A number of factors – some work-related, some indirectly linked – have been identified as affecting managerial satisfaction in the hospitality industry. These include: pay; long hours and difficult schedules; lack of appreciation in the workplace; an unstable labor force; high turnover; frequent interactions with rude, unruly customers; government regulation; an unhealthy lifestyle; and strained family relationships (see Staff, 2001).

Presently Gen Y hospitality managers are making their way into the work place. Because of the growth of the industry and the historical amount of turnover, they may be called upon to manage and/or move up the ranks *post haste*. Keeping them “on board” in this milieu would seem to be imperative. To some extent familiarity with their expectations may help these efforts. Accordingly, the purpose of this study was to examine the job expectations of hospitality students. Another was to compare their expectations to job satisfaction scores of managers. Lastly, to examine the dimensions that define job satisfaction by generation.

METHODOLOGY

The job satisfaction model was used to examine levels of satisfaction for foodservice managers and student expectations. In particular, the short form of the Minnesota Satisfaction Questionnaire (MSQ) was given to managers in the industry as well as to hospitality students. Although usually used to measure job satisfaction of employed individuals (i.e. the managers), it was modified to examine student expectations about the components or dimensions that define it – like compensation and advancement. Instead of indicating level of satisfaction, student participants were asked to indicate the importance of the dimensions on a 5-point scale; in some cases the stems had to be modified slightly. In this way the importance attached to aspects of their eventual/perceived employment could be assessed. Student participants were solicited from six different hospitality courses in a hospitality and tourism management program at a major U.S. university in the Midwest. The courses were chosen to obtain representative samples from different cohorts, and to minimize the possibility of surveying students more than once. As per university guidelines, participation was both voluntary and anonymous, and the instructor of record was not involved. To assess whether their expectations were realistic the students’ (mean) scores were compared to job satisfaction scores of managers. The managers’ scores were obtained from a study examining the causes of turnover in the hospitality industry (Ghiselli et al., 2001 April).

RESULTS

Profile of the Respondents. In total 328 students participated. This represented approximately 60% of the undergraduate hospitality population. By gender 62.6% of the respondents (n = 202) were females, and 38.4% were males (n = 126). Slightly more than a third of the respondents were seniors or “super seniors” in that they were in their seventh semester or beyond (37%). Among the other respondents 18% (n = 59) were in their first year, 19.2% (n = 63) were in their second year, and 25.6% (n=84) were in their third year. Over 85% would be classified as Generation Y.

As for the managers, there were 438 respondents. The sample consisted primarily of general managers (28.5%), first assistant managers (23.5%), and assistant managers (33.4%). The respondents operated the following restaurant types: full-service restaurants where the average check was over \$10.00 (47.1%); full-service restaurants, average check under \$10.00 (28.5%); limited-menu, no tableservice restaurants (6.7%); and commercial cafeterias (17.7%). By gender, 34.0% (n = 146) of the managers were female, and 66.0% (n = 284) were male. More than one-third had a bachelor’s degree (35.7%) - with 12.9% of the respondents indicating they had a bachelor’s degree in a hospitality-related area.

The average age of the respondents was 32.6 years (n = 430), and the median was 31 years. More than one quarter of the respondents were between 25 - 29 years old, and approximately two-thirds were 25 - 40 years old. Surprising, perhaps, was the (relatively small) number of older managers: only 10% of the respondents were 45 years old or older. On average, the managers had been working for their current employer 5.5 years, been in their current managerial position 2.9

years, and had 7.7 years of experience in various managerial foodservice positions. This compares well with the industry average of 4.3 years for foodservice managers and supervisors (U.S. Bureau of Labor Statistics, 1993-99).

Student Expectations

Hours. On average the students expect to work 50.8 hours per week in their first job after graduation (n=322). About 15% indicated they expect to work 40 hours or less per week (n=49). Also, 20% expect to work 57.5 hours or more per week (n=63), and a handful 70 or more hours weekly. Interestingly, the relationship between expected hours and expected pay was small and not significant ($r=.016$, $p=.77$). What's more, the students felt that pay and the amount of work they do was very important/extremely important; on the MSQ the average for this component of job satisfaction was 4.31 (n = 328).

Pay. The students were also asked to indicate the amount they expected to be paid on their first job after graduation. The median amount overall was between \$35,000 and \$37,900 per year. The median for males was slightly more than that of females; for males the median was the same as it was overall whereas for females it lie between \$32,000 - 34,900. Moreover, almost one-third of the female respondents felt they would earn less than \$32,000 per year, whereas about one-sixth (17.9%) of the males felt they would earn that amount.

Promotion. The students were asked to indicate how long they felt was appropriate before receiving a promotion. Two-thirds indicated that they felt they should receive a promotion within 12 months (of starting employment). For the group as a whole the average was 1.2 years. While there was no significant difference, males were slightly more optimistic in that they expected to be promoted after 1.14 years (average), whereas females after 1.22 years. Even though the relationship between expected hours and length of time to first promotion was small and not significant – it was negative.

Job Satisfaction. As indicated the Minnesota Satisfaction Questionnaire was used to measure manager satisfaction and student expectations. The top three dimensions of Job Satisfaction for managers were: being able to keep busy all the time; the way my job provides for steady employment; and the chance to do things for other people. But for the students these items were not very important – in fact being able to keep busy all the time was one of the lowest rated items. Based on their mean scores the items the students considered most important were: the opportunities for advancement; the competence of supervisors; and the feeling of accomplishment.

More importantly, the differences in rank suggest discrepancies exist between the environment in which the students will soon be involved and their expectations. The items with the largest discrepancy were:

- Being able to keep busy all the time
- The opportunities for advancement on this job
- My pay and the amount of work I do
- The chance to tell people what to do
- The feeling of accomplishment I get from the job
- To do things that don't go against my conscience
- The way my boss handles his/her workers

Also worth noting is the size of the scores. The managers were satisfied to very satisfied with only a handful of items. The students, however, considered most items very important to extremely important.

Satisfaction levels were also compared by generation. When ranked from most satisfying (1) to least satisfying (20), Boomers and Gen Xers often were in agreement. For example, both generations indicated that they were most satisfied with being able to keep busy all the time. This was not as satisfying for the Silent generation. Also, there was general agreement that foodservice management positions were very satisfying as regards steady employment, not having to do things that go against one's conscience, being able to do things that make use of one's abilities, and having the chance to do things for others. All three generations, however, were not very satisfied with the pay and the amount of work performed, and the praise for doing a good job

The extent to which age and opportunities might be correlated could be reflected in the increasing dissatisfaction by generation with the opportunities for advancement on the job. The Silent generation members were most dissatisfied with this dimension, Boomers next, and lastly Gen Xers. Students, on the other hand, considered this the most important item (based on the mean score). Some of the other items that seemed to trend with age include: the chance to work alone on the job; working conditions; and the chance to tell people what to do.

DISCUSSION AND CONCLUSION

On average the students expect to work 50.8 hours per week, earn between \$35,000 and \$37,900 upon graduation, and be a GM in a little over 4 years. The managers in this sample worked on average 57.3 hours/week and earned between \$35,000 - \$37,900 (median) - including any bonus that was received – and had 7.7 years of managerial experience.

As might be expected, managerial pay varied by company and position. But more than that 'Food Preparation and Service-Related' occupations have been and continue to be among the lowest paying at both the hourly and managerial levels (U.S. Bureau of Labor Statistics, 1992). In 2000, for example, the average hourly wage for food preparation and serving-related occupations was \$7.72; for foodservice managers the mean wage was \$16.51/hr., and the average annual salary, \$32,350. These compare with \$12.72/hour for production workers in general, and \$32.78/hour for management occupations as a group (U.S. Bureau of Labor Statistics, 2001). Based on the mean scores Gen Yers consider other items more important. Nevertheless pay is still highly regarded ($\bar{x} = 4.31$).

By generation Boomers and Gen Xers agree on a number of items. Not having to do things against one's conscience, providing for steady employment, the chance to do things for others, and telling employees what to do are among the components defining job satisfaction they consider being satisfied. Gen Yers, however, do not consider these items as important as other items. What's more the items Gen Y considers most important - opportunities for advancement, competence of supervision, the feeling of accomplishment – are not as satisfying as they may need to be.

There are also some items that seem to be less satisfying by generation. These include the working conditions, opportunities for advancement, and the chance to work alone on the job. The opportunities for advancement seem to be less satisfying the older one gets. Likewise the working conditions are very important to Gen Yers - but are not proving to be satisfying for older generations. Total satisfaction seems to be diminishing by generation as well. Gen Yers do not consider working alone on the job to be very important. Also, they do not believe telling people what to do and keeping busy all the time very important.

Practitioners have indicated that students may overestimate their abilities and have unrealistically high expectations about their first jobs. At the same time, they feel that hospitality education programs could better prepare graduates by incorporating more leadership into the program, and emphasizing experiential learning - among other suggestions (Lefever & Withiam, 1998).

Granted, students may not graduate with all the requisite skills and educators may be able to do more. At the same time, however, hospitality companies may not be giving a realistic picture of the industry. For example, students expect to work 50 hours per week on average. They are very concerned about the chance to make use of their abilities, the working conditions, and advancement opportunities. Also, they do not expect that working more hours will necessarily result in greater pay. Whether or not foodservice and hospitality companies are addressing these aspects of job satisfaction is arguable in light of the satisfaction levels of current managers.

"Have it your way!" To maintain consistency as well as meet the demand for services, foodservice companies will have to retain managers at the unit level. Moreover, in this highly competitive marketplace, individuals who understand the particulars of the business and the risks associated with preparing thousands of meals in a safe, sanitary, and timely manner, and who can control the costs in a dynamic environment are an invaluable resource.

At times there seems to be a short-term approach/mentality towards foodservice employees and managers. Some of this may be due to the one size fits all method of managing nonsupervisory and managerial employees. Ideally companies should be able to assess individuals in order to gauge where they are at - not where they should be. Hospitality businesses and foodservice in particular, may be able to achieve their operational and corporate objectives more readily if they have a better understanding of the differences among generations in the workforce – and manage accordingly.

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PROPENSITY TO COMPLAIN: AFFECTS OF PERSONALITY AND BEHAVIORAL FACTORS

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ABSTRACT

Literature suggests that the antecedents of complaining involve more than dissatisfaction alone, several other factors affect consumers' propensity to complain. This study proposed and tested a model that examined the influences of personality and behavioral factors on consumers' propensity to complain to further advance the understanding of consumers' complaint behavior by building on the efforts of previous researchers. Findings suggested that the locus of control and price consciousness of consumers are the key antecedents of consumers propensity to complain. Theoretical and managerial implications of these findings are discussed in detail.

Key Words: Service experience, propensity to complain, locus of control, price consciousness, interpersonal influence, dissatisfaction.

INTRODUCTION

Studies suggest that retaining an existing customer costs a lot less than attracting a new one. One way of retaining existing customers is to build mutually beneficial, long lasting relationships with them. However, consumer dissatisfaction and resulting consumer complaints to and about service companies represent the formal manifestation of a breakdown in the relationship-building process (McAlister & Erffmeyer, 2003). Especially in the restaurant business, having dissatisfied customers is inevitable because of the diversity of the restaurant customers, and the heterogeneity and variability of restaurant products. As hard as restaurant managers try, even the best restaurants will have an occasional late delivery, overcooked dinner, grumpy employee/customer or other service failures (Gursoy, McCleary, & Lepisto, 2003). These occasional service problems may not dissolve the relationship, 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. "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, & Makens, 1999, p. 47). Beyond the opportunity for recovery, complaints also provide an opportunity to gather information that can be disseminated and used throughout the organization for product modification, service enhancements, and preventative measures. Management initiatives and resources devoted to capturing and responding to complaints and problem areas and practices that create dissatisfaction serve as one indicator of customer orientation. Thus, both the content and process of consumer complaint management create opportunities for strengthening company performance (McAlister & Erffmeyer, 2003).

However, it appears that the antecedents of complaining are more involved than dissatisfaction alone. Researchers have linked individual differences to complaining, including gender of the complainer (Duhaime & Ash, 1980), situational and personal factors (Day, 1984; Gursoy et al. 2003), as well as socioeconomic class and income (Jones, McCleary, & Lepisto, 2002), and personality and behavioral factors (Jones et al. 2002). The purpose of this study was to gain a better understanding of consumer complaints by developing and testing a model that examines the effects of personality and behavioral factors on consumers' propensity to complain in the service sector. The theoretical framework for the study was drawn from consumer complaint behavior theory.

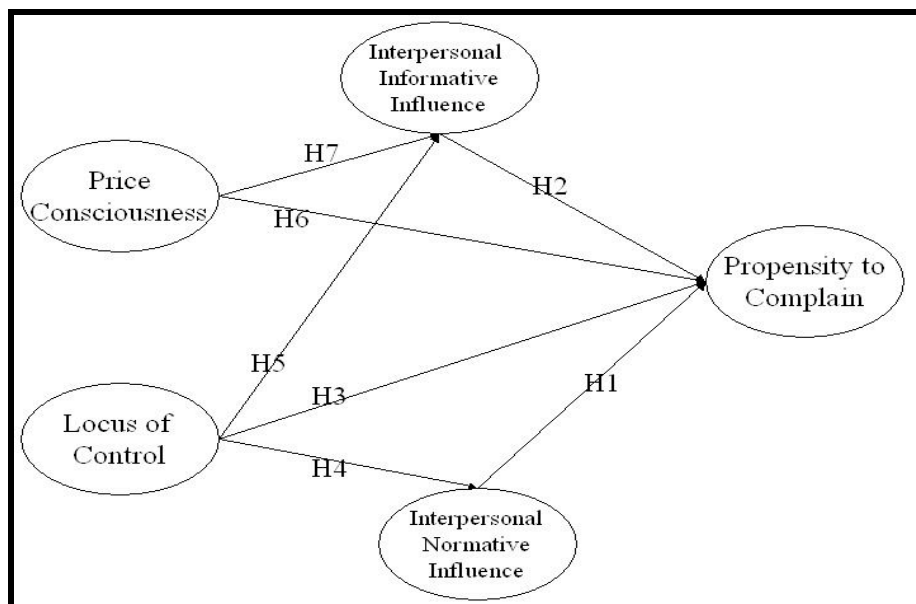
Proposed Model

Figure 1 presents the proposed model. Each component of the model was selected based on the literature review and research of other models. As seen in Figure 1, the model proposes that consumers' propensity to complain is likely to be influenced by their locus of control, susceptibility to interpersonal influences (both normative and informative influences) and their price consciousness. The model also proposes that consumers' locus of control is likely to affect their susceptibility to interpersonal influences and their price consciousness is likely to influence their susceptibility to informative interpersonal influences.

Consumer Complaining Behavior (CCB) and its Antecedents

Studies suggest that the antecedents of complaining are more involved than dissatisfaction alone. Researchers have linked individual differences to complaining, including gender of the complainer (Duhaime & Ash, 1980), socioeconomic class and income, situational and personality and behavioral factors (Jones et al. 2002), the expected outcome of the complaining, and their previous experiences with complaining (Kolodinsky, 1995; Singh, 1989). However, this study only focuses on the impact of consumers' personality and behavioral factors on their propensity to complain: the affects of consumers' susceptibility to interpersonal influence (both informative and normative influences), price consciousness, and their locus of control on their propensity to complain.

Figure 1
Proposed Model

*Susceptibility to Interpersonal Influences*

Susceptibility to interpersonal influences represents an individual's likelihood of being influenced by family and friends and is believed to influence consumers' propensity to complain (Jones et al. 2002). Bearden, Netemeyer, and Teel (1989) suggest that the consumer susceptibility to interpersonal influences has two dimensions: informative influences and normative influences. Several hospitality researchers suggest that both normative and informational influences are likely to influence consumers' propensity to complain. For example, Malafi, Cini, Taub, and Bertolanmi (1993) argue that the information a consumer receives from advice, whether it provides direction about solving a problem or about reference group opinions, is likely to influence his/her propensity to complain.

Previous studies suggest that locus of control is one of the personality factors/traits that is most likely to be related to the complaining behavior (Kowalski, 1996). It refers to the extent to which one believes that life events depend on one's own actions or qualities (dimension of internality). A higher score on the locus of control scale indicates a sense of external control, being controlled by outside sources. A lower score indicates a greater sense of internal control or having control of one's life. Studies reported that internal locus of control is associated with higher perceived control of one's activities. Kowalski (1996) suggests that people with an internal locus of control are more likely to complain than people with an external locus of control because they believe that by complaining they should be able to have some control over the dissatisfactory experience. This study proposes that internally oriented consumers are more likely to complain than externally oriented individuals.

Several studies examined consumers' price consciousness in a restaurant setting. For example, Kiefer and Kelly (1995) examined the relationship between price consciousness and restaurant value. However, their findings were inconclusive. Later Jones et al. (2002) studied the relationships between price consciousness and complaint behavior. They reported that while people who are the most price conscious are likely to complain to anyone including the service

providers, servers, and their friends and relatives, people who are less price conscious are less likely to complain to anyone about their dissatisfactory service experiences. Since a consumer's price consciousness includes knowledge, perceptions, attitudes, and orientations, it is possible that this variable is likely to influence a consumer's susceptibility to informative influences, which focus on learning about products and services to increase the existing knowledge in order to minimize the risk (Zeithaml, 1984). A consumer who is concerned about the price is likely to attempt to improve his/her existing knowledge about prices by actively soliciting information from others such as friends and relatives, or by passively obtaining it by the mere observation of others.

Based on the preceding discussion, following hypotheses are proposed.

- Hypothesis 1: Consumers' susceptibility to normative influences directly affects their propensity to complain.
- Hypothesis 2: Consumers' susceptibility to informative influences directly affects their propensity to complain.
- Hypothesis 3: There is a direct inverse relationship between individuals locus of control and their complain behavior.
- Hypothesis 4: There is a direct inverse relationship between individuals' locus of control and their susceptibility to normative influences.
- Hypothesis 5: There is a direct inverse relationship between individuals' locus of control and their susceptibility to informative influences.
- Hypothesis 6: There is a direct positive relationship between price consciousness and consumers' propensity to complain.
- Hypothesis 7: There is a direct positive relationship between price consciousness and their susceptibility to informative influences.

METHODOLOGY

Data for this study were obtained from the 2001 survey of the Adult Longitudinal Panel (see Lepisto, 1997, for more details on the Adult Longitudinal Panel). Data from the third wave of surveys were used in this study. The sample size of the third wave was 542. The panel is a mature group of adults ranging in age at the time of this study was conducted from 30 to 92 with a mean age of 62 years. The average annual household income was \$60,310 and the average years of education completed was 14.48. Sixth-three percent of the respondents were male and 37 percent were female. The demographic profile of the panel was found to be somewhat upscale, which is considered good for the study because upscale sample members are more likely to dine at table service restaurants. The members of the panel who responded to the third wave frequented table service restaurants on average of 6.3 times per month, making them prime customers for table service restaurants.

Measurement Scale

Three items were used to measure consumers' complaint intentions/behaviors. The price consciousness construct was measured using four items derived from assorted psychographic scales (Lepisto, 1997). The susceptibility of interpersonal influence construct in this study was separated into two dimensions (i.e., informative and normative), both of which were derived from the scale developed by Bearden et al. (1989). Locus of control was measured by five items, which were adopted from Villani and Wind (1975). A seven-point "strongly disagree-strongly agree" Likert scale was used to measure all items.

Data Analysis

Structural equation modeling (SEM) was utilized to empirically test the relationships between the constructs in the proposed model. First, a confirmatory measurement model was tested. Afterwards, a structural model was tested. The structural portion of the SEM allows for the testing of multiple equations with multiple dependent variables. This statistical method provides parameter values (i.e., path coefficients) for each of the research hypotheses and determines their respective significance.

RESULTS AND DISCUSSION

All of the composite reliabilities were above .70. The overall fit of this final measurement model was $\chi^2_{(160)} = 264.06$ ($p = 0.0$); GFI = .95; AGFI = .94; NFI = .90; NNFI = .95; CFI = .96; IFI = .96; PGFI = 0.72; PNFI = .76, and critical $N = 402.02$. Further, the indicators of residuals standardized RMR (root mean square) and RMSEA (root mean square error of approximation) were .042 and .036, respectively. The findings also indicated that the measurement model had both discriminant and convergent validity.

All of the goodness-of-fit statistics of the proposed theoretical model were above the recommended threshold

values except for the chi-square value. The χ^2 value with 162 degrees of freedom is 306.97 ($P = 0.00$). Given the known sensitivity of the χ^2 statistics test to sample size, a number of fit indices are utilized to measure the fit of the proposed model. All of these fit indices indicate that the proposed hypothesized structural model fits well to the data: GFI = 0.94; AGFI = 0.93; PGFI = 0.73; NFI = 0.90; NNFI = 0.94; PNFI = 0.76; CFI = 0.95; IFI = 0.95; Critical N (CN) = 352.00; standardized RMR = 0.060; and RMSEA = 0.042.

Four of the seven proposed hypotheses were found to be significant at .05 significance level; therefore, those four hypotheses were supported. The hypotheses that were proposed to examine the relationship between susceptibility to normative interpersonal influences and propensity to complain (hypothesis 1); between susceptibility to informative interpersonal influences and propensity to complain (hypothesis 2); and locus of control and susceptibility to informative interpersonal influences (hypothesis 5) were not supported. Hypotheses 3 that proposed a direct inverse relationship between individuals' locus of control and their complaining behavior was supported ($-28, p < 0.05$). This finding suggests that individuals with internal locus of control are more likely to complain if they are not satisfied with the service experience compared to individuals with external locus of control. This is consistent with results of previous studies that individuals with internal locus of control are more likely to complain in order to regain control of a situation by putting an end to a dissatisfactory service experience (Jones et al. 2002). Another reason why they may complain more frequently than individuals with external locus of control might be the expected outcome from complaining. Consumers are likely to complain only if the perceived benefit from the complaining is worth the effort. In the case of individuals with internal locus of control, the expected benefit of complaining is to put an end to a dissatisfactory service experience and therefore, gaining a better control of the situation. Hypothesis 4 proposed that individuals' level of locus of control is likely to determine their susceptibility to normative interpersonal influences. This hypothesis was also supported ($.35, p < 0.05$). This finding suggests that individuals with external locus of control are more likely to be susceptible to external influences. They are likely to modify their behaviors in order to make sure whatever they do and what ever they buy is acceptable to others. This finding is also consistent with the findings of previous studies that suggest externally oriented individuals are more likely to be personally affected by external than internal factors. They are likely to have less control of their own activities. However, hypothesis 5 that proposed a direct relationship between locus of control and susceptibility to informative interpersonal influences was not supported ($.04, p > 0.05$). Findings of this study suggest that individuals with both internal and external locus of control have similar level of susceptibility to informative interpersonal influence. This finding contradicts with findings of previous studies that individuals with external locus of control should be more open to suggestions from others. This contradictory finding may be explained by the type of product, a restaurant experience, examined in this study. Because restaurant customers cannot try a restaurant's service and food before they actually buy them, suggestions from their friends and relatives are likely to play a significant role in selecting a restaurant. Hypothesis 6 that suggested a direct relationship between consumers' price consciousness and their propensity to complain was supported ($.28, p < 0.05$). Hypothesis 7 that proposed a direct relationship between consumers' price consciousness and their susceptibility to informative interpersonal influences was supported ($.51, p < 0.05$). This finding is consisted with previous studies that consumers who are highly price conscious are likely to actively seek information from others such as friends and relatives in order to minimize the risk of paying too much and to find the good or service that offers the best value. As far as these people are concerned, low price is the value and lower the price higher the perceived value of a good or service (Zeithaml, 1984).

IMPICTATION

According to the emerging view in relationship marketing and the service quality literature, instead of viewing costumer complains as a negative indication of service quality, managers should view them as a chance for recovery of dissatisfied consumers to satisfied, loyal, ones. This study offers some insight into better understanding of consumers' propensity to complain. Findings suggest that customers with external locus of control pose serious problems for managers because they are not likely to complain directly to the business. In other words, they are not likely to give the opportunity to the management to recover from the dissatisfactory service experience. Instead, they may take their business somewhere else. They may also broadcast their dissatisfactory service experiences. Another group that pose problems to management is the group of customers who are not price conscious. Like customers with external locus of control, these customers appear to defy recovery and discuss their dissatisfactory experiences with their peers. Because it is hard to identify these groups of customers, collective action at the industry level may be necessary. Restaurant industry associations and other industry groups may need to pioneer collective actions that will minimize and manage consumer alienation.

CONCLUSION

This study proposed and tested a model that examined the influences of personality and behavioral factors on consumers' propensity to complain to further advance the understanding of consumers' complaint behavior by building on

the efforts of previous researchers. The advantage of incorporating multiple personality and behavioral factors as antecedents of consumers' complaint behavior within a single model is that it facilitates understanding of relative affects of each factor on propensity to complain and the interrelations among those factors. Not surprisingly, the locus of control and price consciousness of consumers were found to be the key antecedents of consumers propensity to complain. By contrast, the effects of consumers' susceptibility to interpersonal influence on propensity to complain were found to be insignificant. It is clear that individuals with internal locus of control are more likely to complain compared to individuals with external locus of control. In addition, findings suggest that the likelihood of restaurant consumers' complaining directly increases with the level of price consciousness of a consumer.

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SUSTAINABILITY AND TOURISM/HOSPITALITY DEVELOPMENT –PROPOSING AND ALTERNATIVE
FRAMEWORK FOR QUANTITATIVE MODELING

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ABSTRACT

This paper discusses ways to reflect the qualitative concept of sustainability over quantitative hard numbers, taking emerging implications of recent sustainability lending cases in developing nations into consideration. Discussion on incorporating the sustainability concept into existing frameworks of feasibility studies and financial statements is followed by the exploratory application of alternative quantitative framework to reflect qualitative sustainability concepts into explicit numbers, with an emphasis on capturing broader activities that are outside the framework of traditional reporting methods.

Key Words: Quantitative modeling, sustainability, SAM, poverty alleviation

INTRODUCTION

The main objective of this paper is to present a quantifiable framework for sustainable tourism development based on observations of cases of sustainable commercial investments in emerging markets. The concept of sustainability appears somewhat distant to hotel lending practices in developed nations, such as the United States. Classrooms in hospitality educational institutions are seldom closer to incorporating how the knowledge of the sustainability concept would interact with the established mainstream quantitative financial tools that have been taught in decades to produce future leaders of the industry. Yet, through the long process of experimenting, the World Bank group, through its private sector investment vehicle, the International Finance Corporation, began to shape a direction to let the required compliance with sustainability co-exist with the established method of evaluating financial returns of the tourism-sector related investments in developing nations in the world. Rigorous quantitative analysis of return on investment has not been compromised for the sake of accommodating the compliance with sustainability criteria. What we can observe of the process of IFC's evaluation of tourism/hospitality projects in the developing nations offers not only the immediate hints for hotel developers interested in the investment in developing nations, but also the possible directions for leaders of hospitality companies and educators in developed nations to prepare themselves for dealing with the growing social and environmental obligations as desired practices. Established in 1956, IFC is World Bank Group's investment vehicle for private sectors. It has committed more than \$31 billion of their own portfolio investment into both equity and debt portions of development projects in developing nations in the world, where commercial money center banks tend to shy away due to high perceived risks with the sovereign nations. IFC has been active in international syndications, raising \$20 billion from commercial banks, which otherwise may not invest in risky poor nations. What is less known, but is of great interest to tourism/hospitality educators and practitioners, is that IFC has invested in more than 180 "tourism" sector projects, 90% of which are indeed funding the hotel-related development projects in developing nations. According to Mr. David Welch, Industry Specialist at IFC, about 3 ~ 4% of total investment portfolios have been allocated into the "tourism/hotel" sector. While the mission of IFC requires them to invest in risky, poorer nations of the world (i.e., non-OECD member nations), it is interesting to note that IFC often chooses the specific industrial sector of tourism as a national driver for growth. Tourism as an industry has a specific appeal to IFC due to its widespread impacts on generating employment and income over a relatively larger local population, fitting well with their mission of alleviating poverty in sustainable manners. Hotels are considered the core infrastructure for national tourism development, thus they attract a majority of the IFC investments into the tourism area.

In this paper, due to the limited availability of actual data in tourism specific projects, we will review several development projects of IFC in both tourism and non-tourism sectors to identify what made each project unique to be considered as a sustainable project. We will then discuss how we can capture sustainability into the existing feasibility studies and financial statements, followed by an exploratory application of alternative quantitative framework to reflect sustainability concepts into hard numbers.

LITERATURE REVIEW

One of the most frequently quoted definitions of sustainability is the one made by G. Brundtland, Prime Minister of Norway shown in the report "World Commission on Environment and Development" in 1987. The core message was that "sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future". While the discussion on sustainability is gaining momentum, the majority appear to be still

discussing qualitative attitudes. As for the quantitative analysis of the tourism industry, Kass & Okubo (2000) describes Travel and Tourism Satellite Accounts, which is based on the Input-Output framework. Concept of this framework will be useful as we discuss alternative framework to capture the sustainability concept later. Duchin (1998) indicates usage of Input-Output framework for measuring structural change in economy in quantitative manners. Hassan (2000) discusses sustaining longevity of a given destination as a function of responding to market demand and competitive challenges. IFC/World Bank Group, together with Ethos Institute and SustainAbility issued a mostly qualitative, but descriptive, report on sustainability cases in emerging markets (2002). We will look into some cases that are quoted in the report to extract some characters of sustainability in this study.

Review of Sustainability Cases

In this section, we will look at seven cases of sustainable developments engaged by IFC/World Bank group to identify what the unique characters of each project were in terms of sustainability.

Case-1: Cembrit, Czech Republic (\$5 million loan in 1995)

The formerly state-owned Cembrit was a medium size Czech company producing construction materials based on hazardous asbestos. As the nation tried to adopt EU-based tougher environmental regulations, the company could have been shut down if it did not choose to transform itself into producing cellulose-based roofing materials. The company proactively addressed the changing environmental requirements in mid-90s, and that resulted in exporting goods to a new market, an environmentally conscious but lucrative Western European market. Cembrit also worked with local community for the required supplies, creating a community that benefited from its success as well. By complying with sustainable criteria, Cembrit benefited from access to new markets, resulting in increased revenue.

Case-2: Aserradero San Martin, Bolivia

Aserradero, a Bolivian logging and wood products company, adopted requirements by the Forest Stewardship Council (FSC), showing that their woods are from sustainably managed forests. Their efforts for obtaining FSC certification led to higher premiums on their products and access to markets in developed nations. According to Aserradero, they believe they receive 10-15% premiums over comparable wood products without such certification. Aserradero benefited from access to larger markets and also from price premiums for their sustainable products.

Case-3: Inka Terra, Peru

Inka Terra operates two small hotels in an area with “the world’s greatest diversity of ant species in a single location and with the largest known collection of native orchid species”. Inka Terra works with the local community, government, NGOs, scholars and scientists, and is developing plans with the local community to generate alternative livelihoods to traditional mining and logging sectors. Inka Terra benefits from better and more stable relationships with the local community, as its operation depends on various local inputs. This general acceptance and understanding by the local community is called “a local license to operate”.

Case-4: Conservation Corporation, Kenya, South Africa, Tanzania, Zimbabwe

This company operates 27 lodges and camps in safari locations in multiple nations, and is said to be the largest eco-tourism group in Africa, with approximately 3,000 people employed. The company has been stressing social responsibility through its operations and that is attributed to successful attraction of equity investments from overseas investors. This case shows that sustainability compliance may bring better access to global capital markets for their financial needs.

Case-5: Haiha-Kotobuki, Vietnam

This joint venture company in Vietnam cites the reputational benefits from its social activities of developing a program for the prevention and control of HIV/AIDS. The company believes it gained local trust for the company and its products. The Haiha-Kotobuki case shows that good corporate citizenship will bring respect from the local community and may result in an increase in revenues in the long run due to a superior reputation.

Case-6: Himel Power, Nepal

Himel Power made a separate small power plant for the surrounding rural community, independent of the national commercial grid. It also provided various social infrastructures for the surrounding community. It is believed that the company’s investment remains largely undisturbed by the on-going civil conflict, as its work has been widely respected by both sides of the conflict. The Himel Power case shows that sustainability compliance with regard to the local community relationship can be considered as extra insurance to reduce operational uncertainties which can often be considered merely as “uncontrollable”.

Case-7: Zimele, Anglo American, South Africa

Anglo American is a South-Africa based mining and extraction company with its operations spreading worldwide. It has a business unit called Zimele, which will invest either equity or debt into small to medium-sized companies established to undertake outsourcing businesses from Anglo American. Anglo American sees that it is important to empower the local black community who are willing to create reliable local businesses on a commercial basis to sustain. The Anglo American case shows that sustainability attributes can be incorporated into a commercial framework of outsourcing, which will lead to better community relationship and reputation, as well as rendering impacts on the local/regional economy. A good reputation of a company with sustainability compliance is surely hard to be quantified but it can be considered as a mean to reduce operational risks of potential conflict, anger, jealousy, subsequent inefficiency and sabotage from the local community.

What we learn from various seven cases would be beneficial for tourism/hospitality educators to learn unique characteristics of sustainability compliance, and for practitioners to envisage a business model for tourism/hospitality developments in the developed nations.

Unique Characteristics of a Sustainable Project Development

It appears that initial investment or operating expenses of the sustainability compliant project may go higher than non-sustainable standard cases. Since the sustainability compliance does not necessarily require an investor to accept a lower rate of return, we have to assume that those extra investments would be recovered. Based on the observation of several cases, the answers for such recovery should be in two ways.

- 1- Higher Revenues – obtained either by higher revenue per unit or higher profit margins than comparable cases of non-compliance with sustainability criteria
- 2- Lower operating expenses – either by higher retention of human resources or lower expenses due to “local license to operate”, than comparable cases of non-compliance with sustainability criteria.

Either of the two cases is expected to generate enough EBITDA to compensate for higher interest expenses, depreciation and amortization charges associated with extra sustainability compliances. Whether the customers are willing to pay premium for your corporation’s compliance with sustainability criteria would be left for short-term chances, but in the long run, they appear to be the direction that the world is heading for based on the cases. In order to model such practices of sustainability compliance and recovery of funds, there would be two conceptual approaches – one to utilize the existing quantitative frameworks of feasibility and financial statements, and the other to create a more tailor-made framework to capture the effects of sustainability compliance of an investment project.

Incorporating the Sustainability into the existing framework (Financial Statements)

As for the balance sheets, any additional equipment required to meet the sustainability criteria should appear on the balance sheet to be depreciated/amortized appropriately. Such additional depreciation/amortization charges will give extra burdens to the operator to generate the positive net income in the income statement. This extra burden of non-cash expenditure is supposed to be compensated by higher revenues by way of premium payments from customers who find value in staying at a property in compliance with sustainable criteria. When a project provides employees with appropriate social services not provided by the local government/community, then such expenditures may structurally inflate not only the initial project costs, to be reflected as higher depreciation/amortization and interest charges, but also undistributed operating expenses of the project after its openings. This extra burden on the expenses is supposed to be compensated by lower operating expenses such as “lower absenteeism and lower employee turnover” and “local license to operate”, which means less adversarial attitudes and thus, less administrative expenses for contingency expenditures during operation. In some cases, the developer has to provide local community with supporting facilities, as in the case for Himal Power.

(Feasibility Studies)

While we can maintain a typical format of a current feasibility studies, the concept of sustainability compliance can be incorporated so that subsequent effects of such compliance can be shown in a quantitative manner. First, the additional amount of initial fund may be required as the developer decided to comply with sustainability criteria. The compliance will most likely end up with additional investments into some supporting facilities or activities, such as health care facilities, housing, basic community infrastructures such as extra roads, schools and childcare facilities. Some other investment in non-physical assets include extra training of indigenous people to be hired as employees, extra health benefits, etc. Extra investment will be reflected as larger balance sheets (more assets, more liabilities), and also larger expenses in the income statement. The typical feasibility studies also include a certain kind of investment analysis typically by the NPV (net present value) method or the IRR (internal rate of return), which usually includes a concept of reversion of equity (=disinvestment, sales) at the end of projected years, often being 10 years. It is plausible to assume a lower

capitalization rate for the assumed disposition of the project with sustainability criteria, based on the notion that the next investor will find premium value in the project with sustainability criteria. The case of Conservation Corporation indicates such notion of an ability of sustainable tourism operator to attract wider investors for lower cost of capital.

While some sustainability concepts can be incorporated into the existing formats of feasibility studies and financial statements, we need to seek for a methodology to quantify other concepts that cannot be captured by existing formats.

Modeling Sustainability in an Alternative Framework

The Social Accounting Matrix (SAM) is a framework that captures all the economic activities in a given region for the period of one year. SAM is the extended version of the Input-Output (I-O) modeling in that households are included within the model in addition to inter-industry transactions among industrial sectors. SAM is made in a way to depict roles of each major transactions in the society, namely, production activities (where I-O data are described – consisting of transactions among industrial sectors), institutions (where the final demands are generated – consisting of households, firms and governments) and factors (where the capital and labor offered by the institutions are utilized by the industrial sectors – consisting of labor and capital, generating labor income and rental income). Structural superiority of SAM modeling to others would lie in its ability to incorporate the intricate interactions among those three components, namely production activities, institutions and factors.

Production activities

Productions of each of the sectors are put along the rows and purchases by each of the sectors are displayed along each column. Each column would be normalized to form a standardized A-matrix, showing required inputs for the production of each commodity. In a traditional Input-Output framework, this is all that matters. Other components are set as “exogenous”, meaning that they are outside of the modeling.

Institutions

In a typical I-O/SAM modeling, it is the final demand that drives the whole economy. And the final demand is generated by the “institutions” which consist of households, firms and governments. In a typical developed economy, household consumption, or personal consumption is the largest component of the final demand, thus the household is often used as a proxy of institutions as a whole. When institutions require goods and services for their consumption, they would stimulate the “production activities” to meet the demands. In a tourism/hospitality setting, we can say that when the tourists demand goods and services of tourism commodities, the tourism industry, consisting of hotels, restaurants, transportations and many sectors, respond to supply such commodities. When the goods and services flow from the production activities to the institutions, monetary flow occurs on the other direction, from the institutions to production activities. A question of from where the institutions, such as households, receive money to spend for final consumption cannot be shown in the bilateral relationship between production activities and institutions. Thus, we need to discuss less-intuitive concept of the factors (of production), which is virtually a market in which institutions (households) provide labor and capital for production activities in exchange for receipts of labor income and profits.

Factors of Production

This is reflecting a concept that labor and capital are owned by the institutions (households etc) and they can be offered to the factor’s market where production activities may purchase them. This trilateral relationship among production activities, institutions and factors can indeed clarify fuzzy, qualitative concepts associated with sustainable developments. This conceptual framing can show how a tourism/hospitality operation in compliance with sustainability would interact with local/regional economies in a quantitative manner. A simple example of the SAM would be shown in figure 1.

Figure 1
A sample SAM structure made by the author

	A	B	C	factors	Institu(HH)
A	0.006	0.002	0.011	0	0.006
B	0.025	0.025	0	0	0.136
C	0.14	0.069	0.039	0	0.071
factors	0.45	0.417	0.55	0	0
Institutions	0	0	0	0.992	0.01

Here is the quick review of how the basic SAM structure works. In this example, a sub-matrix of 3 x 3 (industrial sector A, B and C) represent the I-O component, or production activities, and factors and institutions compose outer spaces.

If you look at column A, you can tell that sector A will require 0.006 of output from sector A, 0.025 from sector B, and 0.14 from sector C. The important point is that in exchange for the inputs, monetary flows occur from purchasing sectors to producing sectors. Sector A also require factors (labor and capital) that equal to 0.45. By providing labor and capital, the factors in return receive the monetary flow from purchasing sectors. By providing factors (labor and capital) to the factors market, institutions (households) receive in return 0.992 of labor income/rent from factors. With such income pouring in, the institutions again purchase good and services from sector A for 0.006, from sector B for 0.136, and from sector C for 0.071.

Now we will apply the sustainability criteria into the SAM framework, and full structure of SAM is shown as Figure 2. First, in the SAM, imports are exogenous as shown at row 6 column 1 and row 6 column 2 (hereafter we express this as $T_{6,1}, T_{6,2}$). The larger imports a project has, the less impact it provides to local/regional economy because imports does not require factors input from the local/regional economy. The cases of Cembrit, Inka Terra and Anglo American show proactive utilization of local suppliers, and such policy of benefiting local stakeholder can be reflected as reducing imports in each purchase column and increase dependency on local/regional inputs. In the SAM this will lead to the increased multiplier effects on local/regional economy. In the case of Haiha-Kotobuki and Anglo American, the companies decided to educate local employees, and this can be shown as less expatriates and more local factors inputs in the SAM. Utilization of local labor force can be practically achieved only when the quality of labor for intended tourism/hospitality operations are appropriate enough. This is where the developer's longer-term investment in education on the house can be justified. Investment in education will be recovered by not only higher productivity, customer satisfaction, but also higher utilization of local factors, resulting in higher multiplier effects from the same tourism/hospitality operation.

Figure 2: Structure of a Social Accounting Matrix
(Made by Dr. Iwan Aziz, Professor, City and Regional Planning, Cornell University; Lines added by the author)

	Incomes	Expenditures								
		1	2	3	4	5	6	7		
		Activities	Commodities	a Labor	b Capital	a Households	b Firms	c Government	Capital Account	Rest of World
1	Activities		Domestic Sales					Export subsidies		Production
2	Commodities	Intermediate demand				Households consumption		Government investment consumption	Investment	Domestic demand
3	Factors a. Labor	Wages								Factor incomes from abroad
4	b. Capital Institutions a. Households b. Firms	Rent		Labor income	Distributed profits Non-distributed profits	Intrahousehold transfers Transfers	Transfers	Transfers		Transfers from abroad
	c. Government	Value-added taxes	Tariffs Ind. Taxes	Taxes Social sec.	Taxes on profits	Direct taxes	Taxes			Households income Firms income Government income
5	Capital Account					Household savings	Firms savings	Government savings		Capital transfers
6	Rest of World		Imports	Factor payments			Current transfers abroad			Imports
7	Total	Production	Domestic Supply	Factor outlay		Households expenditures	Firms expenditures	Government expenditures	Total investment	Foreign exchange earnings

We can identify those transactions that are mainly estimated through survey instruments, i.e. Household Consumption ($T_{2,4a}$), Interhousehold Transfers ($T_{4a,4b}$), Labor Income ($T_{4a,3a}$), Distributed Profits ($T_{4a,3b}$), Wages ($T_{3a,1}$), and Rent ($T_{3b,1}$). Often, in the absence of any reliable independent estimates and also for the sake of consistency some transactions are clearly determined residually as would be the case for Household Savings ($T_{4b,4a}$), for example.

In the case of Anglo American, the company promotes outsourcing of non-core businesses to local entrepreneurs, even offering them with debt/equity investments and technical support. This not only allows the company to concentrate its resources into core-businesses, benefiting shareholders, but also providing local/regional economy with an opportunity to start up small to medium-sized business, benefiting local stakeholders. The company's decision leads to an increase of inter-industry transactions $T_{2,1}, T_{1,2}$ in SAM. We see similar strategies of companies to let the local stakeholders share the momentum of success as suppliers in cases of Cembrit and Inka Terra.

The effect of capturing new export markets and subsequent increases in revenues can also be captured in the SAM in the export column, which is often titled as "Rest of the World". That is where the sub-matrices $T_{6,1}, T_{6,2}$ are located. Unlike flow of goods by manufacturing industry, export of the tourism/hospitality business can be brought by hosting guests from outside of the region. Export of tourism/hospitality commodities will stimulate local economy through inter-

industry transactions, as export will require more inputs from local industrial sectors and factors, generating additional labor income to local/regional economy.

When the local/regional government decides to invest into local community for basic infrastructures, such action can be captured in the column 4-c. It is interesting to note that when the indigenous people are unemployed and uneducated, the government has to spend the money for transfers at $T_{4a,4c}$. Once people are educated and employed, government in return can receive reverse cash flow, or direct taxes on their labor income at $T_{4c,4a}$. In case a developer decides to invest into social goods in the local/regional economy, then that can be captured in the capital account column 5 $T_{1,5}, T_{2,5}$, as are the cases for Himal Power to invest into extra hydropower plant only for benefit of local community. When a company's consistent efforts to comply with sustainability criteria enables it to tap the foreign capital markets such as the cases for equity investment for Conservation Corporation or debt for Cembrit, such transfer of funds can be captured at column 6 $T_{4b,6}$. Thus SAM is structurally good at capturing economic benefits of sustainability compliance by a tourism/hospitality operation for local stakeholders, while the feasibility study and financial statements are good at showing required information for the shareholders.

Poverty Alleviation Modeling by SAM

SAM framework allows us to go deeper into the cause of poverty and thus specific policy analysis on a quantitative basis, when we plan on the tourism/hospitality projects in a poverty region. By obtaining disaggregated household data based on household income levels, the authority and a developer of tourism/hospitality developer can work together to make best use of economic impact of the proposed project. The root cause of consistent and structural poverty can be verified as the disengagement of poorer households from any economic activities that we described – providing either labor to the factors market to receive labor income, or capital to the factors market to receive rents. In order for the poorer household to be engaged in the upward spiral of economic improvement, the basic education and training would be the key to make their labor employable in a competitive factor's market. Otherwise the poor households remain outside of economic cycle, deprived of receiving income and participating in basic economic activities. Subsequently those without skills or knowledge will remain net recipient of government transfers, leaving heavy burden on the local/regional government to support their consumption. This dynamic cycle of education, employment and economic improvements can be well explained quantitatively in the SAM structure, while the traditional feasibility study and financial statements cannot capture all the interactions of social and economic aspects that are beyond the scope of those established reporting tools.

CONCLUSION

Amid an abundant existence of qualitative discussion of attitude towards sustainability compliance, we tried to present a more quantifiable framework to put the good cause into actual numbers. For the time being, concurrent utilization of existing feasibility studies/financial statements and alternative SAM framework would yield better results by placing sustainability efforts into hard numbers to verify the commercial viability of the sustainability compliance. Hospitality educators and practitioners should be fully aware that sustainability compliance would cost more to build and operate, but proper execution of intricate concept of sustainability into real operation may yield higher return and get the initial investment back in the long run. Thus, an important implication for developers and lenders to realize would be that sustainability compliance is not necessarily a social tax or voluntary deeds to compromise long-term investment objectives, but is rather one of new challenges of time to meet. The possible rewards from sustainability compliance may indeed contribute to boost its business by forging a new business model.

Ironically, sustainability cases appear to be abundant in emerging markets, and IFC claims that as of 2004 more than 25 global commercial banks signed up to verify the borrower's sustainability compliance before making credit decisions. If you recall that 60-90% of typical project funding tends to come as debt portion from lenders, the leverage that lenders can have over a borrower's sustainability compliance would be substantial, to say the least. Change in lender's priority in their credit analysis can trigger sudden increases in pressure over the behavior of borrowers in the tourism/hospitality sectors. It may be a matter of years for tourism/hospitality investors and operators in developed nations to be forced to face the sustainability compliance squarely, and those who forge the appropriate business model of sustainability compliance early enough can benefit more until everybody else follows suit. Tourism/hospitality educators must be the early adopters, and preparation for quantitative business modeling of sustainability would surely be in demand. This paper shows one of the possible paths for such quantification.

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PREDICTING SYNERGISTIC MATCHES IN WINE AND FOOD: INSTRUMENT TESTING AND EVALUATION

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ABSTRACT

While the value of creating synergistic relationships between food and wine in hospitality settings is apparent, very few resources are available that allow operators to consistently and efficiently develop this skill. The scoring process presented in this exploratory study is an attempt to demystify the process and create a valid and reliable training and evaluation method. The matching score calculated is highly correlated with the mean assessment by judges knowledgeable in food and wine pairing. The results of this initial test provide support for the merit of this approach.

Key Words: Food and wine pairing; evaluation; components; texture; flavors.

INTRODUCTION

The wine industry in the United States continues to develop with all 50 states currently producing wine. After more than a decade of decline in per capita wine consumption, the last several years have seen US wine consumption nosing gently upwards (Conibear, 2000). While popular texts in the field provide only a cursory overview of the wine and food pairing process (i.e. Alexander, 2001; Kotschevar & Cichy, 2004; Schmid, 2004), the selection of appropriate wine and food pairings provide operators with opportunities to increase business profitability through wine sales and to increase customer gastronomic satisfaction as part of the dining experience (Van Westering, 1996). While the importance of combining the “right” wine with food is apparent, a review of the foodservice and related literature illustrates the scant amount of research on food and wine pairing interactions with much of the suggested relationships relying on anecdotal evidence (Nygren, et al., 2002; Van Westering, 1996). Researchers have pointed to the study of gastronomy as an important focus to enhance the quality of food and beverage experiences in the hospitality industry and to enhance the quality of experience in gastronomic tourism (Santich, 2004). The importance of the quality of eating has been consistently pointed out in the literature on gastronomic tourism (wine and culinary tourism) as one of the most important predictors for visiting a location. Further, the growth and interest in this area has been suggested as a reaction to the “homogenizing influence of globalization” with visitors seeking unique eating and drinking experiences (Santich, 2004: 22). To respond to these trends, hospitality firms as well as hospitality training and education need to move beyond basic practical courses or training focusing solely on business issues to training that reflects the growing interest in unique experiences by tourists interested in regional gastronomy. The purpose of this exploratory study is to test the potential of predicting wine and food matches using a scoring process of a variety of food and wine element relationships. The development of the food and wine pairing techniques in this manuscript are based on the progress derived from 3 parts of earlier study. A brief summary on each part of the study, the study objectives, and outcomes are presented below.

Initially, a food and wine instrument was developed based on a translation of the instrument used by the Associazione Italiana Sommeliers (the Italian Sommeliers Association). Fourteen upper-division undergraduates majoring in culinary arts utilized this instrument during an elective culinary course. At the beginning of the course, students were instructed on how to use the food and wine pairing scoring sheets as well as being provided with an overview terminology meaning and the ranking process of food and wine elements on the scoring sheets. Students in the course evaluated food and wine matches for 18 foods and 18 wines during the next 6 weeks of class. To evaluate the usefulness and understanding of the initial food and wine-pairing instrument, students’ food and wine evaluations were analyzed for variation by category and given a self-report survey. Feedback from this initial process indicated that the training process in the use and relationship of the elements of food and wine in pairing decisions needed to be expanded and the initial translated instrument needed to be simplified in the layout and term descriptions.

To address issues identified in above, objectives were established as the need to demystify wine terminology, the need for culinarians to develop their wine tasting palates, and the need for a user-friendly training device to educate culinarians to properly and confidently pair food and wine. To address these issues, research and additional literature review were conducted in order to gather information from various sources and investigate the possibility of other tools and

training instruments already in existence. After the available information was synthesized, several factors were considered for implementation in the classroom environment: curriculum methodology, motivation issues, consistent vocabulary, wine tasting training processes, anchor development, and food and wine pairing training. During this process, we utilized a variety of wine sensory analysis sheets based on French, Italian, Dutch and other American versions in testing exercises.

To tie the food and wine elements together in a coherent process, we formulated a research project to create a revised and user-friendly pairing instrument as well as develop exercises to reinforce the process throughout the curriculum. We developed a more concise version for students to use in the early weeks of class in order to expose them to the process of identifying wine terminology and the most basic element ranking. This process also began to establish a foundation in the ability to rank levels of the various wine attributes of color, components, flavors, and tactile sensations.

To simplify the wine and food pairing instrument, we limited the instrument to primary wine and food taste characteristics. Based on the current literature, study objectives and earlier studies, we created the concept of a “Food and Wine Sensory Pyramid” method for pairing decisions. Specifically, based on the similarities of various authors and established direct effects between food and wine elements, we suggest that the most useful terminology is a separation into three categories: main taste components, texture elements, and flavor elements (Immer, 2002; Maresca, 1990; Rosengarten & Wesson, 1989; Simon, 1996). While this separation into 3 distinct elements makes sense based on a sensory perspective, the separation does not indicate that we believe these 3 categories are mutually exclusive but that the separation provides a greater ability to distinguish key drivers of possible food and wine matches. Further, this separation into 3 categories of elements allows the evaluator to distinguish between these categories in a hierarchical fashion.

We define components as “very basic elements that correspond to basic sense perception on the tongue” (Rosengarten & Wesson, 1989: 67). Based on a sensory perspective, it stands to reason that components will generally be key elements in food and wine for pairing purposes. Food and wine components represent the foundation of elements that impact the pleasant feeling of complementary or contrasting characteristics that provides a positive gastronomic experience. Consistent across previous authors, main perceptible components are described as sweet, salt, bitter, and sour. Texture is defined as characteristics in food or wine that create a specific mouthfeel or tactile sensation in every corner of the mouth rather than a perceptible flavor or taste component identifiable in specific parts of the tongue. Just like components and flavors, textures can be used to provide similarity or contrasts in matching. The third category of elements in food and wine is flavors. In several circumstances, flavors and components have been combined and confused (Beckett, 2002; Immer, 2000; Johnson-Bell, 1999). For our purposes, they are a separate element category. While components are tied to basic sense perceptions on the tongue, flavors are closely tied to our perceptions of specific character inherent in the food or wine derived from both aroma and taste sensations. Flavors act as “architectural elements” to food and wine pairing selections. As with a building, architectural elements add interest and complexity to the overall structure. This is true of flavors in food and wine and flavor elements are placed at the top of the sensory hierarchy. Not because they are necessarily the most important element, but because they become a final consideration once the foundation (components) and glue (texture) are deemed appropriate.

The measurement resulted in a 0 to 7 continuous scale for each primary food and wine element. Based on the rating for each element by each evaluator, scores were calculated using a 7-centimeter ruler creating continuous data for each food and wine element. Primary components and textures varied slightly between food and wine. The specific components, texture elements and flavor elements included in the instrument were those that were shown to be perceptible by trained food and wine evaluators as well as being supported in the literature. Food components included in the instrument are sweet, salt, bitter and sour. Meanwhile, wine components include sweet, effervescence and acidity. Food texture elements that were included are fattiness, cooking method and overall body. Wine texture elements include tannin, alcohol level, oakiness and overall body. Food and wine flavor elements include flavor persistence, intensity and spiciness.

METHODOLOGY

The methods used in the study represent an exploratory approach to test the potential and validity of using components, textures and flavors as predictors of food and wine pairing synergy. A trained panel of undergraduate students created a 5-course menu of food and wine pairings based on training and experience over the course of a semester. This resulted in 15 ratings of 5 food dishes matched with one wine each. The results of this food and wine pairing experience were used to create an initial test for exploring the validity and reliability of the pairing instrument.

The pairing instrument is formatted as a 3-part sheet that allows evaluators to specify key food elements, key wine elements, determine whether or not the combination will result in a match, and whether the match is based on similarity or contrast in components, texture or flavor. Wine is evaluated first, then the food item or dish. Once the wine and food has

been evaluated separately, the wine and food combination is tasted together and assessed for a match or mismatch based on similarity or contrast in components, texture or flavors. Because mixed and sequential tasting may impact taste perceptions (i.e. Nygren, et al., 2003), this process allows for both tasting processes for determining a potential match. Table 1 provides the matching relationships used to score wine and food matches. These relationships were derived from a synthesis of the literature on food and wine pairing. First, relationships in the similarity of components were determined. Authors have indicated the importance of matching food sweetness with wine sweetness and have suggested that a match occurs when the level of wine sweetness is greater than or equal to the food sweetness (Robinson, 2001; Simon, 1996). The components of saltiness and bitterness in food make for more difficult pairing when at high levels. When this situation is the case, a wine with a high level of effervescence can be useful to refresh and cleanse the palate. Therefore, high effervescence (i.e. Champagne or other sparkling wines) are suggested when saltiness or bitterness in food is above a moderate level. Finally, the similarity in food and wine acidity levels is suggested. When food acidity is higher than wine, it makes the wine taste flat and flabby (Simon, 1996). Therefore, food acidity should be less than or equal to wine acidity to create a match.

Table 1
Theorized Food and Wine Matching Relationships by Elements

Category	Relationship	Weight	Decision Rule
Components: Similarity	Food Sweetness \leq Wine Sweetness	2	+/- 1 SD
	Food Saltiness \leq Effervescence	1	If saltiness > 5 , +/- 1 SD
	Food Bitterness \leq Effervescence	1	If bitterness > 5 , +/- 1 SD
Components: Contrast	Food Acid \leq Wine Acidity	2	+/- 1 SD
	Food Sweetness = Wine Acidity	1	+/- 1 SD
	Food Acid = Wine Sweetness	1	+/- 1 SD
Textures: Similarity	Food Fattiness = Wine Tannin	2	+/- 1 SD
	Cooking Method = Alcohol Level	1	+/- 1 SD
	Cooking Method = Oakiness	1	+/- 1 SD
	Food Overall Body = Wine Overall Body	2	+/- 1 SD
Textures: Contrast	Food Fattiness = Wine Acid	2	+/- 1 SD
Flavors: Similarity	Food Persistence = Wine Persistence	1	+/- 1 SD
	Food Intensity = Wine Intensity	1	+/- 1 SD
	Food Spiciness = Wine Spiciness	1	+/- 1 SD
Flavors: Contrast	Food Spiciness = Wine Sweetness	2	+/- 1 SD

Two important component contrasts are included. One viable contrast is a match in the level of sweetness in food with the level of acidity in wine. A second one is a match in the level of acid in food with the level of sweetness in wine. Both of these combinations have the potential for creating a pleasant sweet/sour taste combination. Matches in similarities between food and wine texture elements include food fattiness and wine tannin level, cooking method and alcohol level, cooking method and wine oakiness, and overall food body and overall wine body. Cooking method impacts food and wine matches by creating a hierarchical impact of “power” or texture to the prepared food. For example, poached chicken has much lighter texture characteristics than roasted or grilled chicken (Robinson, 2000; Rosengarten & Wesson, 1989). Alcohol and oakiness provide a feeling of bigness or power in wine (Immer, 2000) and thus are matched with cooking method robustness in food. An overall assessment of body in food and wine combines all of these items to determine a match in weight of all elements (Immer, 2002; Kolpan, Smith & Weiss, 2002).

One texture contrast is included in the matching assessment score. This contrast is a match between the fattiness of the food and acidity of the wine. Authors suggest that fat in food can be successfully matched with either wine tannin or wine acidity (Beckett, 2002). Three matches in the similarity in the food and wine flavors are included: persistence, intensity and spiciness. These elements create a feeling of equal footing between the food dish and wine rather than one or the other taking on the role of supporting actor in the relationship. One flavor contrast is included: the match of food spiciness with wine sweetness. Authors have suggested a positive relationship when matching spicy foods with sweeter wine types to refresh the palate and prepare it for another bite (Beckett, 2002; Immer, 2002).

To score the relative level of match between food and wine, weights were established as to the value of the match or mismatch. As no viable statistically based weights are available, weights were chosen based on the relative importance of these similarity or contrast relationships in the literature. Therefore, for this exploratory study, higher weights were included for sweetness matches, acidity matches, tannin to fattiness matches, acidity to fattiness matches, overall body matches and food spiciness to wine sweetness matches. These matches received a weight of 2 for scoring purposes while the remaining matches received a weight of 1. The relationships between food saltiness and bitterness with wine

effervescence were only invoked when the saltiness or bitterness were at a high level (greater than or equal to 5). For the other relationships, points were added to the score for a match based on the following decision rules. The value for each food and wine element was based on the average value across the 15-member panel. Because of individual differences in scoring food and wine elements, relationships were considered a fit or match if the difference between the food and wine element was within 1 standard deviation.

RESULTS

Table 2 includes both the mean score for each food and wine element by course as well as the standard deviation (in parentheses). The level of variability by elements varied significantly by food element and wine element type. Panel members were significantly more consistent ($p < .001$) in evaluating food elements (mean standard deviation = 1.22) than wine elements (mean standard deviation = 1.39). Due to the higher standard deviation of wine elements in general, wine element standard deviations were utilized in the scoring procedure for a match or mismatch. Wine elements that had the lowest variance in scoring across the panel include dry-sweet, flavor persistence, spice, tannin, alcohol and oakiness. The wine elements that were least consistent across the panel include acidity, effervescence, overall body, and flavor intensity. Food elements that had the lowest variance across the panel include sourness, bitterness, overall body, saltiness, and cooking method. Food spice, sweetness, flavor persistence, fattiness, and flavor intensity had the highest amount of variance across the panel.

Table 2
Descriptive Statistics and Matching Score of Food and Wine Elements

Wine Elements	Sauvignon Blanc	Beaujolais	Bordeaux Rouge	Cab. Sauvignon	Moscato D'Asti
Dry-Sweet	2.86 (1.29)	2.06 (.78)	1.16 (.91)	.95 (1.02)	5.51 (.85)
Effervescence	.80 (1.27)	.67 (1.19)	.80 (1.46)	.68 (.87)	3.21 (1.68)
Acidity	2.73 (1.52)	1.51 (1.24)	1.17 (.92)	1.51 (.99)	1.71 (1.36)
Tannin	.60 (1.05)	1.49 (1.08)	3.76 (1.29)	3.29 (1.40)	.30 (.42)
Alcohol	2.95 (1.03)	2.37 (1.16)	3.20 (1.37)	3.42 (1.05)	1.99 (1.07)
Oakiness	.89 (1.22)	.97 (.96)	1.57 (1.63)	2.29 (1.24)	.24 (.32)
Overall Body	2.70 (.71)	2.36 (1.38)	3.99 (1.47)	4.09 (1.39)	2.24 (1.52)
Flavor Persist.	3.25 (.73)	2.41 (1.46)	4.37 (.79)	3.92 (.71)	4.38 (1.08)
Flavor Intensity	3.25 (1.05)	1.94 (1.48)	3.31 (1.54)	3.42 (1.57)	3.66 (.96)
Spice	.73 (1.03)	.52 (.44)	.80 (.61)	1.23 (1.23)	.70 (1.68)
Food Elements	Smoked Corn & Chicken Pasta	Salad of Beef, & Arugula	Grilled & Braised Lamb	Smoked Brie w/ Pecans, Garlic, Apple	Sicilian Cake
Sweetness	1.85 (1.13)	1.71 (1.23)	1.35 (1.14)	3.13 (1.34)	4.96 (.88)
Saltiness	2.03 (.89)	1.71 (1.17)	2.24 (1.05)	2.85 (1.49)	.30 (.38)
Bitterness	.18 (.23)	2.33 (1.26)	.43 (.43)	1.07 (1.29)	.42 (.65)
Sour (Acid)	.37 (.47)	1.45 (1.45)	.37 (.48)	.90 (.91)	.58 (.64)
Fattiness	3.72 (.99)	2.13 (1.22)	3.82 (1.27)	3.96 (.93)	2.81 (1.66)
Cooking Method	3.36 (.56)	3.30 (1.42)	4.30 (1.27)	3.98 (.80)	2.53 (1.09)
Overall Body	4.03 (.83)	2.82 (.89)	4.36 (1.14)	4.22 (1.19)	2.77 (1.18)
Flavor Persist.	4.05 (1.27)	3.69 (1.17)	4.67 (1.09)	4.21 (1.25)	4.09 (1.10)
Flavor Intensity	3.00 (1.20)	3.08 (1.32)	4.36 (1.65)	4.19 (1.21)	3.40 (.95)
Spice	1.08 (.94)	1.01 (.92)	1.00 (1.13)	2.28 (1.44)	.62 (1.24)

In addition to the matching score calculated based on matches with food and wine elements, 2 knowledgeable judges attended the 5-course food and wine dinner and rated the level of match using a 9-point scale (1 = no match, 3 = poor match, 5 = fair match, 7 = good match, and 9 = synergistic match). The match level using the relationships shown in Table 1 provides a possible score of 0 to 18. Table 3 provides the summed score by course and the average score selected by the 2 judges. A comparison of the relationship between both scoring methods indicates a high similarity in the assessment of level of match by food and wine course. The correlation is high ($r = .93$) between the scoring method and the mean of the judges' scores. This high correlation provides initial support for the scoring/weighting methodology used in this exploratory study.

Table 4
Matching Scores by Food and Wine Course

Course	Summed Score ¹	Judge Score ²
Grilled Lamb Chop & Braised Lamb Shoulder with Bordeaux Rouge	16	8.5
Salad of Beef, Arugula, Tomatoes & Roasted Garlic with Beaujolais	15	7.5
Smoked Corn & Chicken Pasta with Sauvignon Blanc	12	6.5
Sicilian Cake with Ricotta Icing & Candied Orange Peel with Moscato D'Asti	12	6.5
Smoked Brie w/ Spiced Pecans and Apple Compote with Cabernet Sauvignon	10	3.5

1. Out of a possible 18 points 2. Using a 9-point scale to evaluate perception of match

DISCUSSION AND CONCLUSION

While the value of creating synergistic relationships between food and wine in hospitality settings is apparent, very few resources are available that allow operators to consistently and efficiently develop this skill across employees and across time. The evaluation and scoring process presented in this exploratory study is an attempt to demystify the process and create a valid and reliable training and evaluation method that is applicable for general industry use. The results of this initial test provide support for the methodology and basic concepts used in this study. The matching scores calculated as the sum of 15 potential matches were highly correlated with the mean assessment by judges knowledgeable in food and wine pairing. With the trained panel in this study, members assessed food elements more consistently than wine elements. This situation may be the result of having culinary arts majors as members of the trained panel or it may be the result of a lifetime of tasting and evaluating food items compared to only a limited amount of time tasting and evaluating wines. The process and tests in this study provide support for the value of assessing food and wine elements, their relationships and calculating a matching score as the sum of these relationships. Future research is needed to further define and refine the nature of these relationships.

FUTURE RESEARCH

Further research needs to be completed to provide statistical and practical support for the initial findings in this study. Testing of the reliability and validity of the pairing instrument needs to be completed. A weakness of the current study is that the trained panel selected all food and wine pairings as good matches between the food dishes and wine selections. Based on the scoring procedure and judges' evaluations, the panel had reasonable success in selecting food and wine matches ranging from fair to synergistic. But, purposeful selections of food and wine for inappropriate matches were not included in this initial test. Future research should assess the adequacy of calculating mismatches as well as levels of a match between food and wine. Further study is needed to determine reliable weights for the value of a food and wine match by each relationship. These weights could be developed using a statistically driven method or one derived using survey methodology of experts in the field. A problem not readily apparent in the analysis in this study is the lack of consistent responses in the food and wine flavor categories. Many responses were left blank during evaluation by the trained panel for flavor persistence, intensity and spiciness. Additional study should be completed to determine if missing data was a result of inadequate training on this section, a lack of time to complete this section, or higher difficulty in assessing these elements in general. This situation may also result from the research design of this study. The trained panel was undergraduate students enrolled as an elective course. Thus, the establishment of taste test abilities and the exclusion of unsatisfactory judges was not possible. Second, the testing method did not provide complete control over temperature, color, and other factors that could bias or distract tasters from providing more accurate evaluations.

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MEASURING RETURN ON INVESTMENT OF TRAINING IN THE LODGING INDUSTRY: A PILOT STUDY

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ABSTRACT

The return on investment (ROI) evaluation theory presented by Kirkpatrick (1975) and Phillips (1994) is considered popular and easy models for establishing the impact and value of training programs and budget control; however, few, lodging companies calculate the ROI percentage related to training, citing time constraints, lack of reliable information, and lack of an easy and efficient method for doing so. This study discovered that several lodging companies plan and implement training programs without a projected *bottom-line value*. Without the implementation of a manageable ROI model, the lodging industry fails to thoroughly track the impact of implemented training programs.

Key Words: training, ROI, human resources, cost controls, revenue management, financial management.

INTRODUCTION

This study discovered that top lodging companies most often plan and implement training and development based on inadequate and incomplete feedback from customer feedback surveys, employee performance on pre- and post-tests, information from contracted data collection firms, and just-in-time economic fluctuations reflected in internal financial data. Lacking is an implemented method that completely and adequately measures skills, knowledge, and attitude changes; behavior measurement; retention of information previously learned; and the business impact of training and development programs. Without the specific measurements required of a complete model, one that tracks the benefit verses cost ratios (BCR) and the final calculation of the ROI percentage, human resource departments in the lodging industry fail to thoroughly track the quality of implemented training and development programs as well as the financial justification for their existence.

LITERATURE REVIEW

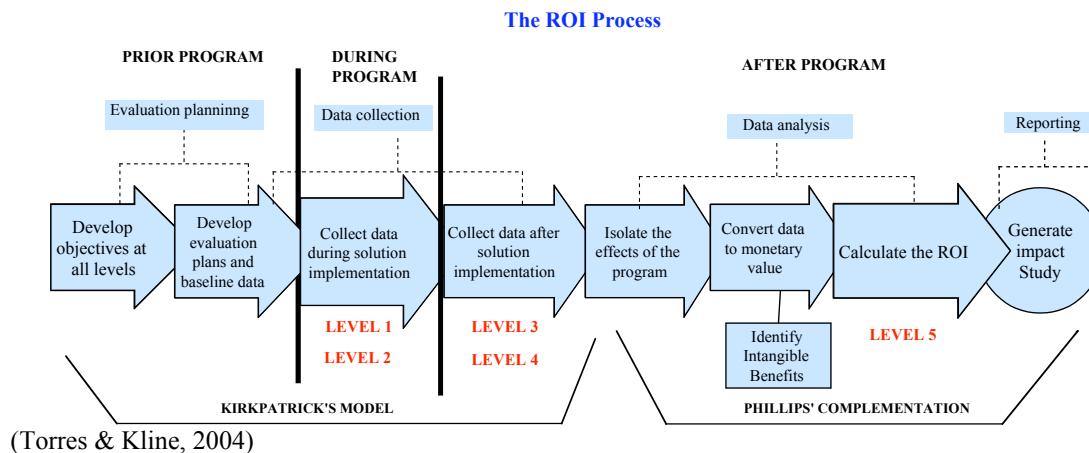
The difficulty in tracking the costs and benefits of human resources has challenged human resource directors, trainers, and ultimately, executive level administration when trying to determine the return on investment of employees. Without a system and internal process to gather the data that is both timely and accurate, calculating the value of what an employee contributes as well as the loss when they fail to perform is virtually impossible; or, is it?

It is widely accepted that the ROI calculation has no static value, is difficult to submit without considerable error, and is an invalid percentage or ratio due to the time value of information (Brown, 2001); however, it could be the calculation providing telling information as to the value of one of industries most valuable assets, its internal customers. The failure to use data that is readily available to at least accept, with notable error, the activities of those in positions considered critical to operations is, to some organizations, is becoming a concern (Amster, 1998). While counting furniture, fixtures, and equipment is easy enough; purchases and costs of product yet fairly simple; it is the valuation of education, experience, and work behavior that has yet to be tracked in the hospitality industry with success, yet it is the very pulse of what drives the industry. There appears to be little control over this asset, little expectation for the tracking of behavior or development of skills, knowledge, and development; and finally, little expectation from the top executive levels of management of human resource professionals to justify costs verses benefits (Barker, 2001; George, 2002).

Due to the popular framework provided by Donald Kirkpatrick (1994, 1996) and an enhanced model later contributed by Jack Phillips (1991, 1994, 1996), calculating the ROI of training departments has been widely implemented by many Fortune 500 organizations as well as small businesses (Sadler-Smith, Down & Field, 1999; Plott, 1998).

Figure 1 shows the combined Kirkpatrick-Phillips model. The lodging industry struggles with converting the data to a monetary value, a step required if the final step, the calculation of cost vs. benefits ratio.

Figure 1
ROI Framework



Basic Formula for ROI Calculation

The formula for calculation ROI is simplistic and appears as a percentage; however, it is the process of identifying the proper variables and of gathering valid data that makes this process complex and confounding. The formula appears below and indeed, the 'devil is in the details':

$$\text{ROI (\%)} = \frac{\text{Benefits} - \text{Costs}}{\text{Costs}} \times 100$$

Parry (1996) stated that the data was difficult to track, the outcome too subjective, and the process of obtaining valid data too time consuming for managers to collect. The variable, *benefits*, is the challenge. The advantages of valuating cost-verses-benefit data far outweigh the disadvantages. However, the ambiguity, subjectivity, time value of information, individuality of behavior, and lack of time and interest in reducing the error associated with each is just too labor intensive (Lachnit, 2001; Roehl & Swerdlow, 1999). According to Feldman (1995) and Kimes (2001) measurement of quality is basic to predicting profitability. Calculating the ROI of training promotes justification of current and future budgets, improved training program selection, tracking of costs versus impact, prediction of increased revenue based on improved service and product selection, decreases in accidents, turnover, and absenteeism, and improved benefit package selection (Rowden, 2001; Phillips, 1996). The theory behind the tracking training and the costs verses benefits of associated activities is that training improves knowledge and knowledge improves delivery and maintenance of all hospitality business-related activities (Soriano, 1999; Partlow, 1996; Breiter & Bloomquist, 1998). According to a leading organization specializing in HR and training, well known corporations such as Delta Airlines, FEDEX, Dell Computers, General Motors, AT&T, and the U.S. Department of Defense (<http://www.franklincovey.com/jackphillips/client.html>), are successfully using the five levels of the ROI evaluation process as presented by Kirkpatrick and Phillips. Why the lodging industry, at large, fails to calculate the fourth and fifth levels of the well-known framework is unknown.

Calculations of yield, revenue, asset, and total quality management (TQM) are analyses well known in industry, including the lodging industry. The tracking of cost verses benefits are realized in these calculations, monitoring of expenditures as related to revenue, the quality output of input, and the management of assets to produce the expected level of gains are common to managers who must report on their investment decisions. According to Tracy & Tews (1995), the lodging industry widely recognizes the value of training and in some of the larger, corporate-owned corporations, consider the quality of training and on-going implementation of well-tracked and evaluated programs to be the secret to their success.

Return on Investment (ROI)

Evaluating return on investment is, according to developers of popular models, easy to calculate, easy to manage, and critical if departments are to justify their existence. Two such researchers well known in training directors and human resource professionals are Donald Kirkpatrick (1975) and Jack Phillips (1994). The models for calculating ROI presented by both researchers, one parlaying upon the other, are specifically targeted to those in human resources and training; however, as both authors state, the framework is applicable to any department and serves more as a step-by-step guide than a department specific model.

Table 1
Kirkpatrick and Phillips ROI Model Levels and Characteristics of Evaluation

Level	Brief Description
1. Training Reaction & Planned Action	Measures participant's reaction to the program and outlines specific plans for implementation
2. Learning	Measures skills, knowledge, or attitude changes
3. Behavior (Job Applications)	Measures changes in behavior on the job and specific applications of the training material
4. Business Results (business impact)	Measures business impact of the program
5. Calculation of Return on Investment, Cost vs. Benefit analysis (added by Phillips)	Compares the monetary value of the results with the costs for the program, usually expressed in a percentage.

Donald Kirkpatrick (1975) was one of the first researchers to study the variables to be included in the calculation of cost-benefit analysis as related to the human resources department and more specifically, training. His effort focused on the variability of human learning processes and the tracking of performance as it related to every function of an employee and the impact these functions had on costs versus benefits derived. To him, the human element affected all other functions considered static as well as variable and without proper training, ultimately had the most impact on revenue, asset management, yield, and total quality. From his perspective, the human element was paramount, but unfortunately, the most neglected financial variable in all equations in business accountability.

Phillips (1997) states that, regardless of the ease of analyzing the information, it is the effort and willingness of all involved to share this information serving as the main barriers for calculation. Barriers, however, seem to be the crux of non-compliance and again, the lack of request for such information. Additional barriers mentioned include lack of skills by human resource staff to understand and gather the information, cost of time and interest in the ROI process, inadequate and invalid needs assessments, fear of failure or losing credibility if numbers are reported that are not impressive, and false assumptions. According to Phillips (1997), ROI is much easier to calculate if the following criteria are considered (pg. 7):

- The ROI process must be simple
- The process must be economical with the ability to be implemented easily
- The assumptions, methodology, and techniques must be credible
- The process must be theoretically sound and based on accepted practices
- The process must account for other factors that influence variables
- The process must be appropriate with a variety of HRD programs
- The process must have the flexibility to be applied to pre- and post programs
- The process must be applicable with all types of data
- The process must include the costs of the program
- The process must have a successful track record in a variety of applications

The above offers enough ambiguity that calculation could be accomplished to a degree that the information is isolated that is considered static as opposed to variable, offering both the predictable and the unpredictable. Once categorization of costs is accomplished, focus can turn to controlling the variable information such that validity increases for an improved prediction of the ROI. The phase of attaching benefits or outcomes to training is the challenging function. How are benefits tracked back to training so that quality impact can be measured?

Level Four of the Kirkpatrick/Phillips plan focuses on attaching benefits to training; however, this is the level at which most human resource executives admit to leaving the process. While decreased turnover, positive feedback from guests, reduced expenses due to mistakes, increased sales, decreased comps are all indicators of quality impact; it is difficult to identify all aspects of training as measurable factors. With a list of negatives, Parry (1996) offers the opinion that ROI is still worth calculating and offers four more reasonable approaches that permit guesstimates, focus on programs that are considered of critical importance, and the tracking costs that are recognizable, available, and easy to calculate.

METHODOLOGY

This exploratory study is the first attempt to determine the extent that return on investment (ROI) in training is used within the hotel industry. This study uses a purposeful sampling method and focuses on a small number of hotel

companies rather than a large sample. Each company was carefully selected because of its reputation for training excellence in the hotel management field. These companies are information rich cases and the interview questions were designed to gather this rich data through the use of open ended questions.

The interview questions were developed through an extensive literature and are based upon Kirkpatrick (1975) and Phillips (1994) framework. All interviews were conducted over the telephone, tape-recorded, and transcribed. Each interview was approximately one hour in length. The interviews were analyzed using a qualitative approach in order to examine the extent to which ROI in training is used by these hotel companies. The qualitative method employed for this study uses Littrell and Dickson's (1998) adaptation of Marshall and Rossman's (1989) qualitative research cycle. This method has also been used in a qualitative study on airline foodservice by Mills and Clay's (2002).

Research Cycle

A Littrell and Dickson's (1998) five step approach was adapted for this study:

- 1) Identify theoretical frameworks and generate research questions based upon the literature review. Further develop the research questions into a usable questionnaire.
- 2) Identify themes with a textual analysis of the transcribed interviews.
- 3) Re- examination the literature and further develop the concepts.
- 4) Answer the research questions through an analysis of the original framework and link the emerging themes and related literature to answer the research questions.
- 5) Identify issues and challenges for future research.

Research questions

The overarching research question is: Do the hotel companies in this sample measure ROI in training? This research is focusing on levels four and five of the ROI model as outlined in Figure 1. Therefore, this research addresses the issue of cost and benefits of training. Managers were asked if and how they measure training costs and benefits. More specifically questions were asked concerning preparation of a training budget. All the questions were open ended and allowed for the respondent to give lengthy and specific answers.

RESULTS

Sample

Six hotel companies were included in this study. Each hotel is unique based upon its market, level of service and structure. These companies were included because they have either received awards for their training programs and or have an excellent industry reputation for their training programs. The sample as a whole involves training programs that have trained over 30,000 employees in the past year. The persons interviewed are directly responsible for training, training budgets, and training effectiveness and or for calculating ROI.

Participating Properties: One Through Six

The *first* hotel company is an international hotel corporation and management company that is publicly traded. The company owns a variety of brands from economy limited service to luxury service. The corporate vice president responsible for training was interviewed. This department has 48 employees responsible for developing and delivering training programs to thousands of employees at both corporate and franchised properties. The *second* hotel company is a luxury property located in the western United States. It is privately owned and operated independently. The training department trains over 6,000 employees per year. The training staff is also responsible for training other employees from other operations within the company. The person interviewed was the training and development manager. The *third* company is a large convention hotel located in the mid-western United States. This property is part of a publicly traded hotel company that specializes in convention hotel destinations. The training department is responsible for training over 1,100 employees per year. The majority of the employees work at the hotel property and the remainder are employed at the company's other sports and entertainment venues. The training manager interviewed is the director of the hotel's university. The *fourth* company has 6,000 employees with unique luxury hotels located in major destinations throughout the United States and Canada. In addition to over 70 hotels, this company also operates over 30 signature restaurants. There are 13 individuals in the training department. The person interviewed is responsible for corporate training and is the Director of Human Resources. The *fifth* company is a medium sized hotel private company that operates mainly in the Midwestern United States. Currently, this company manages over 75 hotels that include select service, convention and other full service hotels. There are 14 individuals at the corporate level involved with training. The person interviewed is directly responsible for all the training company wide and is the director of learning. The *sixth*, and final hotel company, is a corporate owned resort hotel property located in the south eastern portion of the United States. Over 500 employees are trained per year; however this property does not have a training department. Therefore, the general manager is responsible

for the training function and he was interviewed. This hotel is part of a larger corporation that performs training in a decentralized manner. The training is the responsibility of each hotel unit.

Data Analysis and Description

Training Expenses

The theory states that tracking expenses and understanding the costs of training is an essential component to the development of an ROI calculation. Although accounting for costs is necessary the literature also indicates that lodging companies fail to ultimately use a model that completely and adequately tracks costs (Brieter & Woods, 1997; Clements & Josiam, 1995; O'Halloran, 1991; Roehl & Swerdlow, 1999; Thinq Learning Solutions, 2002). The preparation of the budget is the first step in the process that enables a hotel company to track training costs. Two predominate themes emerge from this research that do not support the literature with respect to monitoring and tracking training costs.

Theme #1: Training budgets are prepared with training needs considered first in the process.

Theme #2 The budget is reviewed at the top.

SUMMARY AND IMPLICATIONS FOR THE LODGING INDUSTRY

Implications for the presented information are many-fold. The calculation of revenue, yield, asset, and total quality management have, and continue to give, data upon which business decisions for financial and physical allocations are decided. The calculation of ROI for the HR department and especially training is no different. The failure to at least calculate, with expected but limited error, should be required of HR and training experts for the purpose of prioritizing training, making sound training program and implementation decisions, budget planning for future training, and evaluation of the effectiveness of the training offered.

LIMITATIONS AND FUTURE RESEARCH

This study is a pilot study and therefore is not generalizable to the entire population of HR and training departments within the hotel industry. It represents a sample of hotel companies that have been recognized as offering quality training. Future research should be done to explore the extent to which the hotel industry uses ROI in training.

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LODGING MANAGERS' PERCEPTIONS OF WORK AND PERSONAL LIFE: BALANCED OR IMBALANCED?

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ABSTRACT

This study serves two main purposes: (1) to assess lodging managers' perceptions of difficulty and success in balancing their personal and work lives, and (2) to investigate if lodging managers' work interferes with or is enhanced by their personal lives, or vice versa. The results indicated that most lodging managers believed that they had struck a balance between their work and personal lives. This study identified the respective bidirectional effects of the interaction between work and personal life. Personal life boundaries are more permeable to work demands than work boundaries are to personal life demands.

Key Words: work, personal life, balance, lodging manager

INTRODUCTION

The hospitality industry, unlike most others, expects its managers to provide products and services to consumers around the clock, every day of the year. Not only do managers have to cope with long hours, they must also be able to maintain their focus and perspective in order to defuse crises and solve problems efficiently and professionally (Brownell, 1998). By the end of each work day, many managers have little energy or patience left with which to interact with their family members or deal with problems at home. This situation often leads managers to leave their positions or the industry permanently (Sarabakhsh, Carson & Lindgren, 1989).

Changes in social values have dealt a challenge to the lodging industry as people begin to value their personal lives as much as, or more than, their jobs. In 1990, a survey by Nelson-Horchler found that 41% of Americans rated leisure time as their highest priority. Only 36 % of respondents rated their job the most important priority in their lives (Nelson-Horchler, 1991). Furthering this trend, many Generation X employees, born after 1963, now occupy managerial positions in the lodging industry (Tulgan, 1996). Unlike their Baby-Boomer peers for whom work took precedence over leisure and family, Generation X-ers put a greater premium on quality of life (IH & RA, 1999). In other words, the oncoming generation of lodging managers is even more concerned about life outside of the workplace.

According to a report from the U.S. Department of Labor (2003), today's work force now includes more dual-earner couples who also shoulder responsibility for the care of children or elderly dependents, as well as more dual-professional couples where both members have careers rather than just jobs. The number of people juggling increasingly complex demands of workplace and home is rising.

With these factors in play, the work and personal life balance for the hospitality industry has become a critical issue. It is important for the industry to understand the lodging managers' views on work and personal life balance and to provide resources and support to help them achieve greater life satisfaction while they address the responsibilities and opportunities of their careers. The purpose of this study is to assess lodging managers' perceptions of difficulty and success in balancing their personal lives with work, and to investigate if lodging managers' work interferes with or is enhanced by their personal lives or if their personal lives interfere with or are enhanced by their work

LITERATURE REVIEW

Work and Family Conflict

Studies on balancing work and personal life arose from studies on work and family conflict (Burke & Greenglass, 1987; Burden & Googins, 1987; Hunsaker, 1983; Kanter, 1977; Near, Rice & Hunt, 1980). Work and family conflict has been defined as "a form of inter-role conflict in which the role pressure from the work and family domain are mutually incompatible in some respects" (Greenhaus & Beutell, 1985). While conflict is a normal part of life, an increase in the level of work and family conflict has been linked to negative consequences for both work and non-work domains. Family-to-work conflict was found to be positively related to job stress and depression, although work-to-family conflict did not predict either depression or family distress (Grandey & Cropanzano, 1999). Kossek and Ozeki's 1998 meta-analysis reported that work and family outcomes are related to job satisfaction and life satisfaction. Allen, Herst, Bruck, & Sutton (2000) reported that higher levels of conflict are associated with decreased job satisfaction, career satisfaction, organizational commitment, and job performance, as well as increased absenteeism and turnover intention. Work and

family conflict was found to be significantly related to non-work related outcomes, such as dissatisfaction with marriage, life, leisure, and family. Some stress-related outcomes, such as general psychological strain, somatic and physical complaints, depression, substance abuse, burnout, work-related stress, and family-related stress were also significantly associated with work and family conflict (Adams, King, & King, 1996; Allen, Herst, Bruck, & Sutton, 2000; Boles & Babin, 1996; Burke, 1988; Frone, Russell, & Cooper, 1992; Greenhaus & Beutell, 1985; Netemeyer, Boles, & McMurrian, 1996).

Work and Family Interaction

Frone et al. (1992) further expanded research in work and family conflict by empirically demonstrating that the work and family interface is bidirectional, meaning work interferes with family, and family interferes with work. Conflict can originate in the workplace and subsequently interfere with personal life (represented hereafter as WIF), and conflict can originate in personal life and interfere with work (represented hereafter as PIW). Spillover theory has been widely used to explain the relationships between work and family. This theory denotes the extent to which participation in one domain (e.g., work) impacts participation in another domain (e.g., family). The spillover model proposed that what occurs at work corresponds to what occurs in life outside of work (Staines, 1980). It suggests that what happens at work “spills over” and affects non-work life, and also that personal life events can spill over and affect work. Spillover has been conceptualized both positively and negatively (Grzywacz, Almeida, & McDonald, 2002). Positive spillover refers to enhancement that results from one domain affecting another domain; for example, happiness at work would lead to happiness at home. Negative spillover refers to conflict or interference that results from one domain affecting another; for example, when work is boring or monotonous, workers become “lazy”, which in turn leads to unwillingness to do things at home or with family members (Zedeck, 1992). Based on the literature review, six hypotheses are proposed:

Hypothesis 1: With a career in the lodging industry, the majority of managers will find it is difficult to maintain a balance between work and personal life.

Hypothesis 2: Given the characteristics of the managerial job, the majority of lodging managers will feel unsuccessful in balancing work and personal life.

Hypothesis 3: Managers’ work interferes with personal life more than it enriches personal life (WIP>WEP).

Hypothesis 4: The managerial job in the lodging industry interferes with personal life more than personal life interferes with work (WIP>PIW).

Hypothesis 5: Lodging managers’ personal life interferes with work more than it enhances their work (PIW>PEW).

Hypothesis 6: The managerial job in the lodging industry enhances personal life more than personal life enhances work (WEP>PEW).

METHODOLOGY

Between November 2003 and December 2003, surveys were distributed to 535 lodging managers at 83 properties under one management company. This company has properties in nine states, widely spread across the continental United States and represents different types of lodging operations (business hotels, convention hotels, airport hotels, resort hotels, and residence hotels) and service types from economy through luxury. An on-line survey website was developed that would allow managers to respond to the survey at their own convenience.

Measurement of Perceived Balance

Managers’ perceptions of the balance between work and personal life were measured by two items: “How easy or difficult is it for you to balance the demands of your work and your personal life?” based on a scale from 1= very difficult to 5=very easy, and “All in all, how successful do you feel in balancing your work and personal life? based on a scale from 1= very unsuccessful to 5= very successful. In order to obtain as unbiased an answer as possible concerning work and personal life balance issues, these two questions were placed first on the questionnaire before the other questions could impact the respondents’ answers. A short note appealed to the respondents to answer the questions honestly, and it is an assumption of this research that they did so.

Measurement of Interaction between Work and personal life

Questions measuring work and personal life interaction were derived from family conflict research recommended by the Virtual Think Tank Panel (MacDermid, Barnett, Crosby, Greenhaus, Koblenz, Marks, et al., 2000). This panel was formed in 2000 and consisted of distinguished researchers in the field of work and family study. The interaction between work and personal life was captured by four dimensions: work’s interference with personal life (WIP), work enhancement of personal life (WEP), personal life’s interference with work (PIW), and personal life enhancement of work (PEW). A pilot study was conducted on five hospitality major graduate students with at least 3 year work experience in the industry. Minor modifications to the wording of several items were made so the questions would fit into the broader view of the balance of work and personal life in the current study. The variables related to work interference with personal life (WIP),

personal life interference with work (PIW), work enhancement of personal life (WEP), and personal life enhancement of work (PEW) were determined by averaging their respective items and scoring the answers, so a high score indicated higher levels of each type of interference or enhancement. Descriptive statistics and T-tests were conducted for data analysis.

RESULTS

With 295 questionnaires returned, the response rate was 55%. Of these respondents, approximately half were males and half females. Their ages ranged from 21 years to 62 years, and the average age was 33. Approximately 54% of the respondents were married, and 46% were single. Approximately 46 % of the respondents had at least a bachelor's degree, 27 % had some college. In the busy season, respondents worked an average of 58.8 hours per week while in the low season, the average weekly hours dropped to 49.5.

Hypotheses Testing

The results of the descriptive statistics indicated that over half of the respondents (56%) reported that they felt it was difficult or very difficult for them to balance the demands of work and personal life. Only 20% reported that it was easy or very easy to balance work and personal life. (See Table 1). Hence, hypothesis 1 was supported.

Table 1
Ease of Balancing Work and Personal Life Levels

Levels	Frequency	%
1=Very Difficult	20	7.6 %
2=Difficult	128	48.5%
3=Neutral	64	24.2%
4=Easy	47	17.8%
5=Very Easy	5	1.9%

Note. N = 264, Mean= 2.58, Std Dev. = 0.932

With regard to hypothesis 2, only 23% of respondents felt they were either unsuccessful or very unsuccessful in balancing work and personal life, whereas approximately 44% felt they were successful or very successful in balancing work and personal life. (See Table 2). Hypothesis 2 was not supported.

Table 2
Success of Balancing Work and Personal Life Levels

Levels	Frequency	%
1=Very Unsuccessful	7	2.7%
2=Unsuccessful	54	20.5%
3=Neutral	87	33.0%
4=Successful	101	38.3%
5=Very Successful	15	5.7%

Note. N = 264, Mean = 3.24, Std Dev. = 0.931

Comparing the interference and enhancement from work to personal life, managers perceived more work interference with their personal life (Mean = 3.06, Std Dev. = 0.88) than they perceived work enhancement of personal life (Mean = 2.91, Std Dev. = 0.76), $t(263) = 1.913$, $p = .057$. Hypothesis 3 was supported (WIP > WEP). Regarding the interference between work and personal life, the results of the T-test indicated that managers perceived more interference from work to personal life (Mean = 3.06, Std Dev. = 0.88) than from personal life to work (Mean = 1.91, Std Dev. = 0.55), $t(263) = 22.311$, $p = .000$. Hypothesis 4 was supported (WIP > PIW). In terms of the spillover effect from personal life to work, managers' personal lives enhanced work (Mean = 3.53, Std Dev. = 0.92) more than their personal lives interfered with their work (Mean = 1.91, Std Dev. = 0.55), $t(263) = -26.578$, $p = .000$. Hence hypothesis 5 was not supported. Comparing the enhancement between work and personal life, managers' personal lives enhanced work more (Mean = 3.53, Std Dev. = 0.92) than the work enhanced their personal lives (Mean = 2.91, Std Dev. = 0.76), $t(263) = -10.726$, $p = .000$. Hence, hypothesis 6 was not supported.

CONCLUSION

Perceptions of Work and Personal Life Balance

The results indicated that the majority of respondents (56%) believed that it was difficult or very difficult to maintain a balance between work and personal life. Yet, in general, respondents felt they were able to maintain such a balance, and only 23% of respondents reported that they were unsuccessful or very unsuccessful at balancing their work and personal lives. Approximately 33 % of respondents reported that they were neither successful nor unsuccessful at balancing work and personal life, and about 44% of respondents reported that they were successful in balancing their work and personal lives. One explanation for this somewhat contradictory finding is that some respondents may have accepted a certain degree of conflict between work and other aspects of life. In other words, perhaps some people did not achieve perfect balance, yet were still reasonably satisfied with whatever level of balance they were able to achieve. The results suggest that, despite long working hours and the pressure inherent in the lodging industry, most lodging managers still could strike an acceptable balance between their work and personal lives.

Interaction between Work and Personal Life

This study identified the bidirectional effects of work and personal life. In addition to the conflict between work and personal life, the study uncovered positive connections between the two. However, the strengths of the interactions between work and personal life varied in terms of both direction and effects. The enhancement from personal life to work was reported most frequently by the respondents, followed by work interference with personal life, followed by work enhancement of personal life. Participants were less likely to report that their personal lives interfered with their work; more than 90% of respondents reported that personal life rarely or never interfered with their work, and more than 80 % of respondents even stated that their personal lives improved the quality of their work either “sometimes” or “most of the time.” Even though more than 60% of the respondents claimed that work “sometimes” or “most of the time” interfered with their personal life, more than half of the respondents noted that work “sometimes” or “most of the time” enhanced their personal lives.

The study found that positive spillover from personal life to work was more common than negative spillover. Negative spillover from work to personal life, however, was more prevalent than positive spillover. This finding suggests that work and personal life boundaries are found to be asymmetrically permeable; in other words, personal life boundaries are more permeable to work demands than work boundaries are to personal life demands- work seems to interfere with personal life more than it enriches it. This has important implications for theories concerned with the balance of work and personal life. People who allow work to consume disproportionate amounts of their energy and attention are frustrated in their pursuit to “have it all” (Eagle, Miles, Icenogle, 1997). Conversely, “personal life” seems to enhance work more than it interferes with work. This finding was shown by respondents’ high PEW scores among the four work and personal life interactions. This finding supported the findings of several previous studies (Frone et al., 1992; Hall, 1990; Wiley, 1987).

Similarly, it appears that personal life has a more beneficial impact on work life than work life has on personal life. Even though people today tend to pay more attention to personal life, work is still a priority. Work supports life, provides financial security, and sustains our families and ourselves (Ciulla, 2000). It is also a vehicle for the realization of our individual emotional, social and psychological aspirations (Allen, 1997). Devoting one’s life to work certainly has its rewards, so it should not be surprising that respondents tried not to let their personal lives interfere with their work. This finding was substantiated by higher WIP than PIW scores, and higher PEW than PIW scores.

Limitations of the Study

This study has several limitations. The sample only includes hotel employees who held managerial positions in the U.S., so its results cannot be globally extended to apply to all employees. Further, the results may not accurately reflect the respondents’ true successes. Lodging managers’ perceptions of work and life balance were measured by using two global items. Using only one global question to measure respondents’ perception regarding balance may introduce some bias.

Future Studies

Future studies can be designed to explore the findings uncovered in this study. The majority of respondents reported interference from work to their personal life and interference from their personal life to their work; however, many also reported success in balancing the two. The study seems indicate that some interference from work or personal life is tolerable and acceptable to most of these lodging managers. There are no data that establish a maximum tolerance level beyond an acceptable level. Future research may explore the threshold between acceptable and unacceptable levels of conflict.

This study focuses on managerial employees in the lodging industry, while operational level employees make up 88 % of the lodging industry (U.S. Department of Labor, 2003). It may be valuable to explore the perceptions of operational level employees for possible differences. To better understand managers’ perceptions of work and personal life

balance, personal interviews and stakeholder analysis are also suggested for further exploration of the issue.

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TOURISM DEMAND DETERMINANTS: A REVIEW FOR INTERNATIONAL TOURISM DEMAND FORECASTION

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ABSTRACT

The author conducted an in-depth review on the important variables and issues related to tourism demand determinants for modeling international tourism demand. Although many scholars have discussed various determinants in forecasting tourism demand, the majority of prior studies focused mainly on a set of specific demand determinants in a unique tourism environment. A more holistic review on tourism demand determinants can further contribute to one's understanding towards better tourism theories and forecasting practices. The reviewed demand determinants were conceptualized into a graphical representation to illustrate the dynamic relationships between the origin country and destination countries in the international tourism context.

Key Words: Conceptualization; Demand determinants; Demand modeling; International tourism demand; Tourism forecasting

INTRODUCTION AND RATIONALE

Understanding tourism demand determinants and their relationships with tourism demand is an extremely important subject for tourism forecasters/modelers because the selection and implementation of those demand determinants in a forecasting model determine the model specification and have an effect on how the results of the forecasting model can be interpreted. In this conceptual research, the author conducted an in-depth review on the important variables and issues related to tourism demand and its determinants for modeling international tourism demand. Although many scholars have discussed various determinants in forecasting tourism demand, the majority of prior studies focused mainly on a set of specific demand determinants in a unique tourism environment. While individual studies shed insights into forecasting demand for specific tourism destination cases, a more holistic review on tourism demand determinants can further contribute one's understanding towards better tourism theories and forecasting practices. The author started his discussion on definitions of the tourism demand, then examined important tourism demand determinants and their roles played in demand forecasting models, and finally conceptualized a graphical representation of tourism demand determinants to illustrate the dynamic relationships between the origin country and destination countries in the international tourism context. The author believes that such a conceptual review approach will benefit the tourism research community in general from a theoretical perspective as well as international tourism demand forecasters in particular from a practical perspective.

REVIEW OF TOURISM DEMAND DETERMINANTS

There have been many sources discussing various determinants in forecasting tourism demand (e.g., di Matteo & di Matteo, 1993; Lee, 1996; Qiu & Zhang, 1995; Sinclair & Stabler, 1997; Turner & Witt, 2001; Witt, 1994; Witt & Song, 2001). Many of such sources have been empirical studies with limited discussions of demand determinants. An exception was Uysal (1998) who discussed supply-side determinants of tourism demand from a more theoretical perspective. Also notably was Crouch's work in compiling useful information for selecting important demand determinants (Crouch, 1994b, 1994c). By building on existing knowledge of tourism demand determinants, the author reviewed and organized previously published work to seek a fuller understanding of the subject. Such a more holistic treatment facilitates the development of a conceptual framework later. The following brief sections describe most determinants in their alphabetical order:

Business/Economic Cycles (Origin Country)

Over the years, there have been only a few tourism publications (Coshall, 2000; Wong, 1997) dealing with the business cycle. Business cycles may be short-term and/or long-term cyclical behavior displayed in the tourism time series. These cyclical patterns usually are irregular and account for many forms of economic activity, such as inflation and interest rates. Since business cycles are relatively unpredictable and do not have a direct measure, a possible proxy variable such as the short-term interest rate (either money market or treasury bill/CD rate) may be used in forecasting tourism demand. Higher short-term interest rates (business cycles) in the origin country are expected to have a negative impact on tourism demand for the destination country.

Climates or Natural Disasters (Destination Country)

Significant changes in climates and sudden natural disasters (e.g., earthquakes, hurricanes, tsunamis, and typhoons) have been suggested to have a negative effect on tourism demand (Agnew & Viner, 2001; Chan, Hui, & Yuen,

1999). For example, the impact or even the threat of any significant climate changes or natural disasters can result in serious consequences for the region or country's tourism industry. The climate changes or natural disasters in the destination country can be modeled as dummy variables to reflect their impacts on the tourism demand for the destination country.

Costs of Travel/Transportation (between Origin and Destination Countries)

Travel or transportation costs between origin and destination countries are considered part of own price (Witt & Witt, 1995). Transportation/travel costs are usually calculated by the price of round-trip international airfares. Some possible proxy variables to be considered may include excursion airfare, airlines' revenue per passenger-kilometer/mile, and gasoline prices. Travel/transportation costs are expected to have a negative impact on tourism demand for the destination country since these costs are known to be a resistance (constraint) to travel.

Employment (Origin Country)

National employment figures in the origin country may serve as another indication of the origin country's economic condition and may be speculated to have an impact on the tourism demand. If employment rate (number of employed persons *per capita*) is used, a positive impact may be expected. If unemployment rate is entered in the demand function, a negative impact may be expected. However, employment is rarely used in the demand forecasting studies due to its confounding nature with other economic variables (e.g., income *per capita*).

Exchange Rates (between Origin and Destination Countries)

Exchange rates can be incorporated in relative price variable (to be discussed later) or sometimes can be entered in the model separately from relative price variable in the origin country. If exchange rates are entered separately, the tourism demand model is thought to examine the effect of nominal exchange rates on international tourism demand. Some scholars have warned that it is inappropriate to include both exchange rates and the relative price variable in the demand function because of the risk leading to a multicollinearity problem (Lim, 1997; Witt & Song, 2001; Witt & Witt, 1995).

Income (Origin Country)

There are several choices for this variable to be used in a demand model depending on data availability and researchers' discretions. Most researchers used nominal/real personal disposable or national income in *per capita* form. Some used GDP (growth domestic product) or GNP (gross national product) as a proxy for the income variable. Lim (1997) suggested that lagged income variable should be considered, while Crouch (1994c) suggested equality/skewness of income distribution as an income variable.

International Trade (between Origin and Destination Countries)

International tourism is quite often the generator of international trade flows (Vellas & Bécherel, 1995, p. 239). Some scholars in recent tourism demand studies have looked into import/export volumes or the trade balance between the origin country and the destination country (Kulendran & Wilson, 2000). The general understanding is that the international trade has a positive impact on tourism flows between two countries. In general, the international trade tends to have more impacts on business travel than on leisure travel. The author believes that the better choices are import or export volumes (of goods and services) of the origin country, or the trade balance (exports minus imports) between the origin country and the destination (partner) countries.

Lagged Dependent Variables/Trend and Fashion (Origin Country)

Lagged dependent variables are often called the trend and fashion (or the "bandwagon") effect (Crouch, 1994b, p. 15). Dynamic or long-run models usually consider a lagged effect caused by the change in travel taste (habit or fashion persistence) or other time-related effects (e.g., the word-of-mouth effect and tourism promotion or advertising effects). Witt and Song (2001, p. 109) argued that word-of-mouth recommendations play a more important role in the destination selection than does commercial advertising. Lagged dependent variables are implemented by incorporating "time" as lagged variables from previous periods (i.e., autoregressive terms).

Leisure Time (Origin Country)

This can be a direct measure of average leisure time (hours per week or month) reported by the origin country or alternatively the average number of working hours (per week or month). Obviously, they are opposite in affecting tourism demand. More hours spent at work means less leisure time for travel and tourism purposes. A more accurate measure should consider working hours, public holidays, paid leave entitlements, and retirement arrangement. Graham (2000) argued that in addition to economic and social conditions, such as income and prices, leisure time affects the consumer's ability and willingness to travel, which in turn constrain growth of tourism demand.

Neighborhood Effect (Destination Country)

Crouch (1994b, p. 16) in his review suggested that the majority of tourism studies implicitly assume more-or-less competitive relationships among all destination countries. He also pointed out several counter-arguments by some scholars (Stroombergen, Jackson, & Miller, 1991) and supported the idea that closer destinations are more likely to be complementary because intuitively tourists are more likely to bundle/package such destination in a single trip. This effect may be included in a tourism demand model by a binary dummy variable where 1 represents a pre-defined proximity between the origin country and destination countries, and 0 the reverse. This “proximity” may be defined by physical geographical distance (radius) centered in the origin country. A more convenient way to define proximity may be whether the origin and the destination share a common border.

Population (Origin and/or Destination Country)

The tourism demand for a given destination country is expected to depend on the population in the origin country and to be treated as an independent variable (Witt & Witt, 1995, p. 453). More often, this variable does not appear as an independent variable in the demand model because the effect of population is accommodated by using *per capita* dependent variable. The reason for this adjustment is to avoid the multicollinearity problem between population variable and other independent variables. This variable is most commonly seen in gravity models (Sheldon & Var, 1985) where both populations of origin and destination countries can be included. Data for this variable are often available in annual figures.

Relative/Tourism Price (Destination Country)

The relative price or tourism price refers to cost of living in the destination country, which is considered as one element of “own price” by Witt & Witt (1995). The relative price is interpreted as the cost of goods and services (e.g., local transportation, lodging, food, and entertainment) that tourists are likely to pay during their stay in the destination country. The consumer price index (CPI) ratio between origin and destination countries is often used as a proxy to reflect this relative price. In practice, sometimes this CPI ratio is adjusted for exchange-rate difference between origin and destination countries and is called as the real exchange rate (Rosensweig, 1986). The calculation of this ratio (as a proxy of relative price) is as below:

where RP_{ijt} = Relative price in destination country i (to origin country j) in time t ,
 CPI_{it} and CPI_{jt} = Consumer price indices for destination country i and origin country j respectively in time t , and
 ER_{ijt} = An index of the price of currency in origin country j in terms of the price of currency in destination country i (i.e., the exchange rate between origin country j and destination country i) at time t .

The calculation of this relative price implies that the CPI only serves as a proxy to measure the prices of tourists’ purchases (tourism price) in the destination country because realistically the CPI is not an exact index of tourism price and is designed for typical household purchases (Kliman, 1981).

Seasonality (Origin and Destination Countries)

Seasonality is a very common phenomenon in tourism time series. Short-term international tourist arrivals series often display strong seasonal patterns. International tourists (mostly leisure ones) choose their timing and destinations based on their time constraints and vacation/business activities. In practice, dummy variables are employed to measure seasonal time trends as in most econometric regression models. For seasonal data, where a season consists of n periods, one period is set as the reference period and the rest of $(n - 1)$ periods will be represented by $(n - 1)$ dummy variables in the demand model. For example, three dummy variables are necessary to be included in the tourism demand model when quarterly data are used.

Special Event (Origin and Destination Countries)

Tourism flows are particularly vulnerable to unusual events because tourism products and services are prone to sudden changes in popularity through instantaneous mass communications. Events such as wars, political unrests, major health threats, and economic downturns also bring similar negative impacts to international tourism (George, 2003; Henderson, 2003; Hiemstra & Wong, 2001; Levantis & Gani, 2000; Pizam, 1999). On the other hand, major international sport and fare events have brought positive publicity and impacts to the host destinations/countries (Garin-Munoz & Amaral, 2000; Morse, 2001). Dummy variables can be introduced into the demand model to represent the existence of significant events affecting tourism flows. These dummy variables are time-dependent and can be set at +1 (positive reinforcement of tourism demand or propensity to travel, e.g., World Fares or Olympic games), -1 (negative effect on tourism demand or resistance to travel, e.g., terrorist attacks, wars, political unrests, financial crises, or significant economic recessions), or 0 (no special event) during the period.

Substitution Effect/Prices (Origin and Destination Countries)

Martin and Witt (1988) in their econometric tourism demand study had an extensive discussion on substitute prices. In practice, substitute prices can be the tourists' cost of living variable as a ratio of destination country's CPI divided by origin country's CPI, thus,

where SP_{ijt} = The substitute price of the destination country i (relative to the origin country j) in time t , and

CPI_{it} and CPI_{jt} = Consumer price indices for destination country i and origin country j respectively in time t .

The substitute prices are expected to have a positive impact on tourism demand to the destination country. For example, an increase of cost of living in Canada (a competing destination country) is likely to increase the tourism demand from USA to Mexico (another competing destination country).

Supply-side Factors (Destination Country)

If no lagged dependent variable is included in the tourism demand model, supply-side factors may be considered to account for the supply-side reactions in the destination country to satisfy tourism demand from an origin country. Possible supply-side variables or proxies may include (1) lodging capacity (the total number of lodging establishments or rooms), (2) airline/air transportation capacity (the number of international passenger flights or scheduled flights), and/or (3) capacity improvements or investments (total tourism-related investments such as allocated national budgets for transportation-related constructions in the destination country).

Tourism Marketing Variables (Destination Country)

National tourism organizations of destination countries usually allocate specific budgets for marketing promising origin countries whose residents are more likely to travel to respective destination countries. The marketing efforts may include advertising, promotion, and public relations. Like many other demand determinants, this variable suffers from the same problem of finding available relevant data. The results regarding this marketing variable in the past studies have been inconsistent. Some studies (Barry & O'Hagan, 1972; Uysal & Crompton, 1985, 1987) found little or no measurable effect, but others (Crouch, 1994a; Crouch, Schultz, & Valerio, 1992) found significant effects. If tourism demand modeling is conducted correctly, this marketing variable has strong policy and administration implications since the marketing budgets of national tourism organizations for attracting international tourists are often allocated from the total national budgets.

Other Special Events (Origin and Destination Countries)

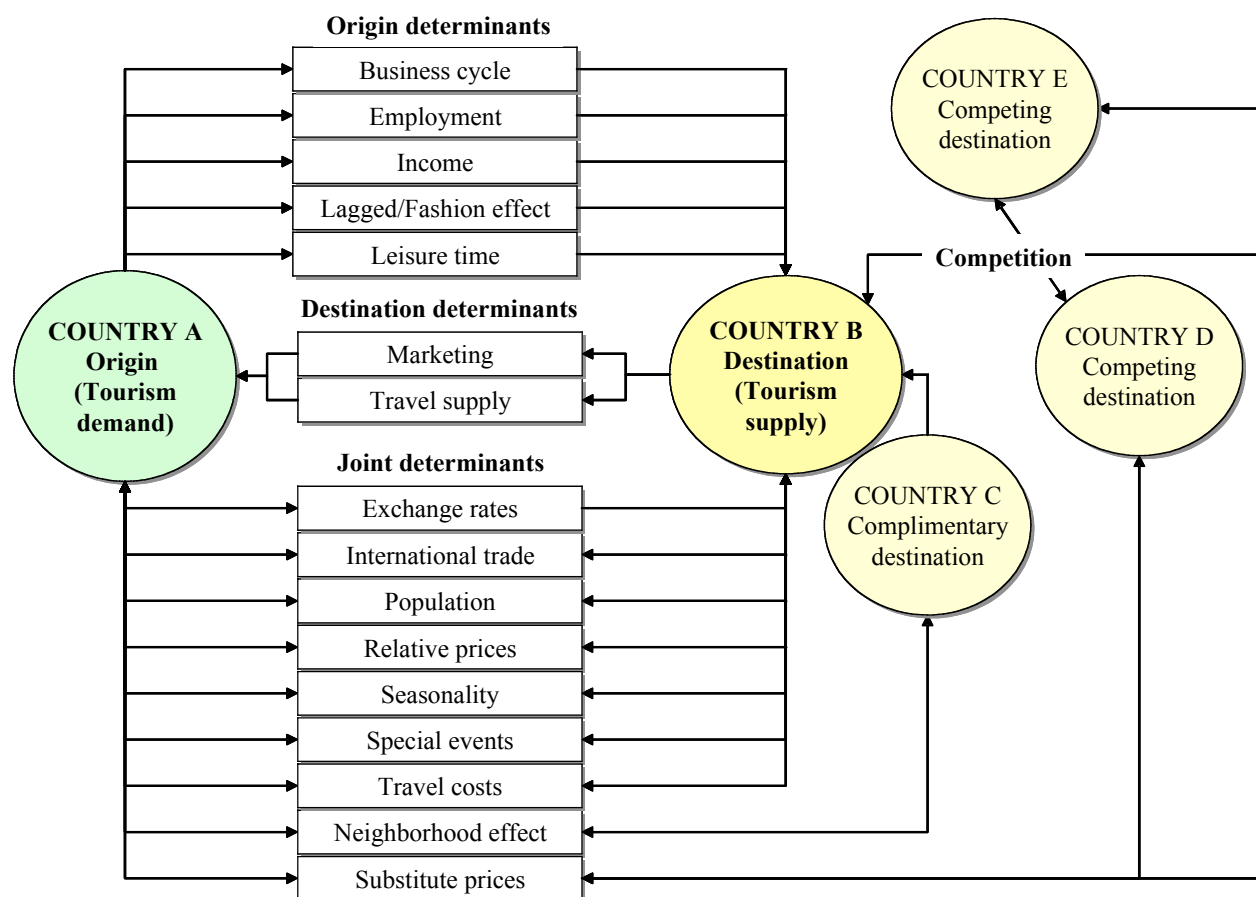
A wide range of qualitative effects can be modeled by using binary dummy variables. Witt and Witt (1995) defined this type of variables as "one-off" events. However, the author categorizes those "one-off" events into "special events" that have discussed in one of previous sections. The author considers that this type of qualitative variables is related to cultural or social heritage. These variables are more persistent and not one-time-only events as described by Witt and Witt (1995). These qualitative effects may include common cultural or social bounds between origin and destination countries such as common language, common ancestry, historical background, or other qualitative characteristics, etc.

A Conceptual Dynamics of Major Tourism Demand Determinants

After the author had examined the above possible tourism demand determinants, he then applied system thinking to conceptualize a graphical representation (see Figure 1) of those determinants in order to illustrate the dynamic relationships between the origin country (tourism demand) and the destination country (tourism supply) in the context of international tourism. Tourism demand determinants are grouped into three categories: push (origin) determinants, pull (destination) determinants, and joint determinants. Borrowing from the push and pull analogy often used in consumer travel motivation theory, the author treats the origin country similar to a "consumer" and individual destination countries as the "destination" in such theoretical framework. The push (origin) determinants are concerned with origin-induced and demand-driven influences from the origin country. These push determinants include variables such as business cycle, employment, income, lagged effect, and leisure time. Their data are collected from the sources in the origin country. In contrast, pull (destination) determinants are destination-induced and demand-driving forces drawing from a single destination country. These pull determinants initiate influences by the destination country to attract tourism demand from the origin country. Travel supply (supply-side factors) and marketing efforts fall into this category. Data of these determinants are collected from the sources from the destination country. Lastly, joint determinants involve bidirectional factors interacted between both the origin and the destination countries. Forces from multiple destination countries may also involve in these cases. These joint determinants affect tourism demand through interactions between the origin country and possibly multiple destination countries. When multiple destinations are involved, the influence of certain determinants may be enhanced (in the case of complimentary destinations) or reduced (in the case of competing destinations). Data

collected for these determinants are sometimes expressed as binary values (in the cases of dummy variables) based on characteristics involving both origin and destinations, or as relative ratio terms (in the cases of exchange rates, relative and substitute prices).

Figure 2
A conceptual representation of dynamic tourism demand determinants



CONCLUSION REMARK

This paper represents the author's attempt to summarize the current state of knowledge on the topic of tourism demand determinants for international tourism demand forecasting. Using a holistic approach, the author discussed the most important variables and issues relevant to tourism demand determinants for modeling international tourism demand. This unique treatment and analysis lead to a conceptualized illustration of the dynamic relationships among different demand determinants in the international tourism context. The endeavor of such conceptualization of a fairly complex and dynamic system contributes to enhancing a better comprehension on how tourism demand determinants work among origin and destination countries. Through a better understanding of the proposed conceptual framework, the author sincerely hopes that tourism educators, researchers, or industry practitioners can benefit from more holistic system thinking for their future work.

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THE COMPARISON OF EMPLOYEE JOB SATISFACTION, JOB INVOLVEMENT, WORK STRESS, AND
TURNOVER INTENTION UNDER DIFFERENT TYPES OF ORGANISATIONAL CULTURES A STUDY OF
EMPLOYEES IN INTERNATIONAL TOURIST HOTELS IN TAIWAN

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ABSTRACT

The impact of organizational culture on organizational behavior has received widespread attention by management scholars. This quantitative study elaborates on and clarifies the relationship among organizational culture, employee job satisfaction, work stress, job involvement, and turnover intention in international tourist hotels in Taiwan. The results of ANOVA analysis showed different organizational cultures (clan, hierarchy, and market, adhocracy) had an important impact on employee job satisfaction and work stress. Some significant correlations also existed among cultural types and employee job attitudes. These results provide an insight into the importance of organizational culture toward employee job attitudes. Further recommendations are also discussed.

Key Words: International Tourist Hotel, Organizational Culture, Job Satisfaction, Job Involvement, Work Stress, Turnover Intention.

INTRODUCTION

Organizational culture plays an important function that influences all aspects of organizational life and behavior, such as employees satisfaction, (Boxx, Odom & Dunn, 1991; Chow, Harrison, McKinnon & Wu, 2002), and employee retention (Chow et al., 2002). The examination of organizational culture can help reveal strengths and weaknesses and lead to strategies to improve performance. The relationships among job satisfaction, employee turnover, and employee performance have been well researched (Boxx, et al., 1991); however, little research has been conducted to analyze organizational culture, job attitudes, job satisfaction, work stress, preferred organizational culture, preferred intrinsic and extrinsic motivators, and employee turnover intention in the hospitality business in Taiwan. This study investigated the relationship among organizational culture and job attitudes of employees in international tourist hotels in Taiwan. The results could provide valuable information for hotel management by giving them a deeper understanding of their employee organizational culture preferences and allowing them to develop a set of suitable strategies to satisfy their employees as well as reduce the high employee turnover condition.

LITERATURE REVIEW

International tourist hotels in Taiwan. According to the Taiwan Tourism Bureau (2005), there are four levels of hotels in Taiwan, which include (a) international tourist hotels — their number grew to 62, and there are still 36 more under construction; (b) tourist hotels — there are currently 26 tourist hotels, (c) general hotels — the current number of general hotels is 3,218, and (d) legal and registered host families — the current number of legal and registered host families is 801. Regulations for approving the highest level hotel, international tourist hotels, include meeting facility standards and service quality. All international tourist hotels must be recertified to meet these standards every three years. The impact on Taiwan's economic growth of the continuing development of the hotel industry is significant. The rising demand for hospitality workers can be seen from the growth of many new hospitality related programs, such as leisure, recreation and tourism, culinary arts, and hotel and restaurant management in colleges or vocational schools in Taiwan.

Organizational culture. Organizational culture has been defined as a pattern of assumptions which were “invented, discovered, or developed by a given group” (Schein, 1985) and as a set of strategies, such as, goals, methods, control of performance, and internal integration inside the organization to cope with the external environment. Additionally, organizational culture also includes: people's interaction, use of language (Goffman, 1959; Schein, 1985; Van Maanen, 1979), the norms that involve working groups (Homans, 1950; Schein, 1985), the dominant values espoused by organizations (Deal & Kennedy, 1982; Schein, 1985), the philosophy that guides an organization's policy (Ouchi, 1981; Pascale, 1981), the rules of the game for getting along in the organization (Ritte & Funkhouser, 1982; Schein, 1985; Van Maanen, 1979), and the feeling or climate that is conveyed in an organization (Tagiuri & Litwin, 1968).

Dimensions and measurement of organizational culture. Many studies have categorized organizational cultures as multi-dimensional, and the dimensions categorized vary: Likert (1967) identified nine organizational variables, Gordon (1988) presented eleven dimensions, and Denison (1990) developed twenty - one measures. Deshpande (1987) offered a

two-dimensional continuum (internal/external orientation, and flexibility/control orientation), and based on these dimensions, Quinn and his colleagues (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), used in this study, which combines the key descriptors (shown in Figure 1) used in identifying the four different types of culture.

Figure 1
The Organizational Culture Profile

<p>1. Culture Type: Clan Competing value: Cooperative teamwork Leader Type: Facilitator, mentor, parent Effectiveness Criteria: Cohesion, morale, human resource development Management Theory: Participation fosters commitment</p>	<p>2. Culture Type: Adhocracy Competing value: Open system Leader Type: Innovator, entrepreneur, visionary Effectiveness Criteria: cutting-edge output, creativity, growth Management Theory: Innovativeness fosters resources</p>
<p>3. Culture Type: Hierarchy Competing value: stable, hierarchy Leadership Type: Coordinator, monitor, organizer Effectiveness Criteria: Efficiency, timeliness, smooth functioning Management Theory: Control fosters efficiency</p>	<p>4. Culture Type: Market Competing value: rational firm Leader Type: Hard-driver, competitor, producer Effectiveness Criteria: Market share, goal achievement, beating competitors Management Theory: Competition fosters productivity</p>

Source: Quinn, 1988, p. 58.

The impacts of organizational culture on organizational behavior. Strong evidence exists regarding the fit between an organization and employees. Chow et al. (2002) found that organizational commitment, job satisfaction, and tendency to stay are strengthened when employees' preferred organizational cultures are the same as the current organizational cultures. Moreover, the strength of organizational culture can be used to positively predict job satisfaction (Chow et al.).

Job attitudes. Employees' job attitudes are the mental statements of employees' perceptions, beliefs, feelings, and expectations toward their work, which are affected by internal and external environments and individual differences. Schneider (1985) suggested that job attitudes include job satisfaction, commitment, turnover intention, and role stress. Tepeci and Bartlett (2002) identified several variables of organizational culture that influence employee satisfaction: team and people orientation, innovation, valuing customers, and employee development. Job satisfaction was negatively correlated with employee work stress and voluntary turnover intention (Huang, 2003; Robbins, 1996; White & Bednar, 1991) and positively correlated with employee performance, productivity, and absenteeism (Robbins, 1996; White and Bednar, 1991). Job involvement is "the degree to which a person identifies with his or her job, actively participates in it, and considers ... performance important to self-worth" (Robbins, 1996, p. 181). Employees with high job involvement also showed less absenteeism and less voluntary turnover intention (Robbins, 1996). Work stress, resulting in physiological and psychological symptoms, such as headache, tiredness, depression, low self-esteem, high blood pressure, and stomachache, had a negative impact on employee work satisfaction and a positive impact on turnover intention (Jamal, 1990; Gupata & Beehr, 1979; Caplan, 1975).

RESEARCH METHODS

Research questions

The purpose of this research was to investigate the relations among current and preferred organizational culture and employee job attitudes in international tourist hotels in Taiwan and to answer the following research questions:

Research question 1. What is the descriptive profile of employees' perceived current and preferred typology of organizational culture as measured by the Organizational Culture Assessment Instrument (OCAI)?

Research question 2. Do current culture types in organizations affect employee job attitudes as measured by the Organizational Culture Assessment Instrument (OCAI) and the Job Attitudes Assessment Instrument (JAAI)?

Research question 3. What are the correlations among employees' preferred organizational cultures, perception of the importance of intrinsic and extrinsic motivators, job satisfaction, job involvement, turnover intention, and work stress as measured by the Organizational Culture Assessment Instrument (OCAI) and the Job Attitudes Assessment Instrument (JAAI)?

Limitations and delimitations. Due to heavy workloads and frequent requests to complete research surveys, hotel employees might have resisted completing this one or responded superficially. This study sampled only international tourist hotels in Taiwan; thus, it may not be representative of all hotels in Taiwan.

Samples and sampling method. Twenty hotels were chosen using stratified sampling method from the sixty-two 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.

Survey instruments

The survey instrument included demographic data, containing 12 questions; the Organizational Culture Assessment Instrument (OCAI), with 24 questions; and Job Attitude Assessment Instrument, with 25 questions. Participants were asked to score their perceptions of how similar the given descriptions were to their own organizations (current culture) and how they thought their organizations should be (preferred culture). The relative levels of similarity were established by scoring from 0 to 100, with "0" corresponding to "least similar" or "least preferred" and "100" corresponding to "most similar" or "most preferred."

The Job Attitude Assessment Instrument, measured job satisfaction, job involvement, turnover intention, work stress, and perceptions of the importance of intrinsic and extrinsic motivators. This was developed from the Michigan Organizational Assessment Questionnaire (MOAQ) and Organizational Commitment survey (Mowday, Porter, & Steers, 1979). Participants indicated their perceptions of similarity levels on a 5 point Likert scale, with "1" corresponding to "less similar" and "5" corresponding to "very similar."

Validity and reliability

The survey instrument was reviewed by a panel of consultants, consisting of servers, housekeepers, chefs, and managers from the 20 international tourist hotels, and was modified based on their suggestions before distribution. After that, a pilot study was conducted with 30 volunteer employees from the 20 international tourist hotels. Further changes were made to attain content validity. The reliability of Cronbach's Alpha Coefficients for OCAI in Cameron & Quinn's (1999) study was .79 for clan, .80 for adhocracy, .76 for hierarchy, and .77 for market. The reliability in this study was .76 for clan culture, .65 for adhocracy, .66 for hierarchy, and .60 for market. The reliability of Job Attitudes Assessment for each part was .82 for job satisfaction, .70 for job involvement, .82 for work stress, .88 for turnover intention, and .79 for importance of intrinsic and extrinsic motivators.

Data collection and data analyses.

The data collection instruments were distributed via mail to human resource managers who had agreed to participate in the study. Of the 600 questionnaires distributed, 299 questionnaires were useable, an actual return rate of 49.8%. The major statistical methods that were applied in this research included descriptive, Pearson correlation and ANOVA analyses.

RESULTS

The results of descriptive analyses.

The overall gender distribution of the participants in this study was 114 (38%) males and 186 (62%) females. Marital status was 124 (41.3%) married, 170 (56.7) single, and 6 (2.0%) in "other status" (divorced, separated, widowed or chose not to answer). Over 50% were single. The age of most ranged between 20-30 years old (44.3%). Further, two hundred (66.7%) were college graduates. Ninety- nine (33%) had graduated with related professional hospitality backgrounds, which included: Hospitality Management 41 (13.7%), Tourism 35 (11.7%), Chinese and Western Culinary Arts 12 (4.0%), Baking and Pastries 4 (1.3%), and Home Economics 7 (2.3%). Clan organizational culture was perceived as the predominate culture. Some (40.85%) perceived their organizational cultures as clan ($M=27.14$); followed by market (25.57%, $M=26.4$); hierarchy (22.9%, $M=24.5$); and adhocracy (10.68%, $M=22.2$). The results showed that the majority of participants (60%) also preferred a clan organizational culture.

The results of ANOVA and post hoc analyses

Levene's test was first applied to test the assumption of homogeneity of variance among the groups. Next, the one-way ANOVA was applied to analyze whether there were significant differences in employees' job attitudes among different types of current organizational cultures. Following this, a post hoc test was performed. Levene's test for homogeneity of variances with significance values of job satisfaction (0.603), job involvement (0.626), turnover intention (0.640), work stress (0.224), importance of extrinsic (0.279), and intrinsic motivators (0.364) exceeded 0.05; therefore, the variances for

the groups were equal and the assumption was justified.

As to the statistically significant ANOVA results, different types of current organizational cultures significantly influenced employees' job satisfaction ($p = 0.008 < 0.05$) and work stress ($p = 0.003 < 0.05$). There were no significant differences among different types of current organizational cultures and employee job involvement, turnover intention, and the perceptions of the importance of the extrinsic motivators. In order to compare the differences, post hoc tests were utilized and several findings were revealed. The mean score of job satisfaction in the clan type of organizational culture was highest followed by the mean scores of adhocracy, hierarchy and market types of current organizational culture. The rank of the job satisfaction level in the four types of organizational cultures was clan (3.359), market (3.227), adhocracy (3.086), and hierarchy (3.013). The mean score of work stress in the clan organizational culture was the lowest (2.30) followed by market (2.489), adhocracy (2.685), and hierarchy (2.736) types of current organizational culture. Thus, employees who worked in a clan culture organization had the highest score for job satisfaction and the lowest score for work stress; however, employees who worked in a hierarchy culture organization had the lowest score for job satisfaction and the highest score for work stress.

The results of Pearson correlation analysis.

The results showed that existing clan culture was significantly and positively correlated with job satisfaction ($p = .00 < 0.5$) and significantly and negatively correlated with turnover intention ($p = 0.001 < .05$) and work stress ($p = .00 < .05$). These implied that the greater the degree of clan culture in the organization, the higher the degree of job satisfaction and the lower the degree of turnover intention and work stress the employees had. Existing hierarchy culture was significantly and negatively correlated to employee job satisfaction level ($p = 0.001 < 0.05$) while significantly and positively related to employee turnover intention ($p = 0.002 < 0.05$) and work stress level ($p = 0.00 < 0.05$). The more the hierarchy type of organizational culture was perceived to exist, the lower the job satisfaction and the greater the degree of turnover intention and work stress. Finally, existing market culture was significantly and negatively correlated to job satisfaction ($p = 0.10 < 0.05$), which meant that the greater the degree of market culture perceived to exist in the organization, the lower the degree of employees' job satisfaction (see Table 1).

Table 1
Correlation Coefficients of Different Existing Organizational Cultures with Employees Job Attitudes

	1.	2.	3.	4.	5.	6.
1. Job Satisfaction	1	.322**	-.571**	-.234**	.104	.248**
2. Job Involvement	.322**	1	-.155**	-.041	.136*	.279**
3. Turnover Intention	-.571**	-.155**	1	.349**	-.036	-.024
4. Work Stress	-.234**	-.041	.349**	1	.046	.013
5. Importance of Extrinsic Motivators	.104	.136*	-.036	.046	1	.169**
6. Importance of Intrinsic Motivators	.248**	.279**	-.024	.013	.169**	1
7. Clan	.237**	-.079	-.188**	-.201**	-.013	-.066
8. Adhocracy	.076	.026	-.055	.080	.039	-.016
9. Hierarchy	-.191**	.046	.177**	.212**	-.031	.086
10. Market	-.149*	.040	.093	.004	-.007	.009

Note. ** Correlation is significant at the 0.01 level (2-tailed), $p < .01$; * Correlation is significant at the 0.05 level (2-tailed), $p < .05$. All significant correlation coefficients are boldfaced.

CONCLUSION AND RECOMMENDATIONS

Conclusions

The results of this research exposed several different correlations among employee preferred organizational culture, job satisfaction, turnover intention, job involvement, work stress and perceptions of the importance of intrinsic and extrinsic motivators. First, from the perceptions of the employees, clan organizational culture was their major preferred culture, and, at this time, this is the predominant one. Second, different organizational cultures might influence employee job attitudes respecting work stress and as well as job satisfaction. Furthermore, from the Pearson correlation results, employee job attitudes have different degrees of positive and negative correlations with different types of organizational cultures. These results suggest that incorporating a clan organizational culture may reduce work stress and increase job satisfaction thereby lowering the turnover rate.

Recommendations for hotel human resource management

It will be advantageous for hotel executives to examine their organizational cultures and carefully select employees who prefer their types of organizational culture. Doing so may increase employee job satisfaction and job involvement while reducing work stress and turnover intention. Awareness of these connections is essential for designing better recruiting procedures or developing efficient interview questions. Further, from the perceptions of the majority of employees, a clan culture organization is their most preferred organization and it has the significant impact of minimizing employee job stress and maximizing job satisfaction. In consequence, the management in international tourist hotels should consider establishing clan culture organization.

Recommendations for further studies

To gain a deeper understanding of the employee preferences of organizational culture and job attitudes, the researcher suggests that corporations use qualitative research methods, such as interviews or focus groups. Further, researchers could replicate this study in different hospitality related businesses, such as resort hotels, city hotels, or business hotels or even in different types of restaurants. It would be interesting to discover if there are different results in different types of hospitality businesses. The results might also help management in different hospitality businesses in developing and designing more efficient human resource strategies. Cross cultural comparisons might also be undertaken to reveal if results differ from country to country. This could benefit management working with employees of different nationalities in the dynamic hospitality business.

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ISSUES AND OPPORTUNITIES IN TOURISM EDUCATION IN NORTH AMERICA

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ABSTRACT

Tourism and hospitality educators must keep abreast of issues and opportunities to ensure the continued relevance of their programs to both students and employers. This paper identifies issues and opportunities related to changing patterns of international student demand, curriculum development and program structure, teaching methods, the integration of teaching and research, professional associations, and the importance of interfacing with industry. Special attention is given to the development of hybrid programs built on the articulation of college and university programs.

Key Words: Tourism education; curriculum; hybrid programs

INTRODUCTION

Tourism education has expanded rapidly over the last few decades reflecting the growing recognition of tourism (and the travel industry that serves it) as one of the world's most significant economic, social and environmental forces (Evans, 2000). Education and training has been developed at various levels, ranging from highly vocational courses through to higher research degrees. The growth reflects the widely held belief that one of the major challenges the industry faces is to recruit, develop and retain employees and managers with appropriate educational backgrounds. Although this rapid growth of university programs in tourism is not without critics (Evans, 1993), the trend is generally recognized for its merits (Ryan, 1995). In order to maintain this meritorious position, educators must understand and appropriately respond to several key issues and opportunities. These are presented below.

Student Demand

At present in North America there are 176 institutions granting degrees to more than 55,000 students enrolled in approximately 800 programs offering associate degrees, certificates or diplomas (National Tourism Foundation, 2004; CHRIE, 2004). In its publication titled, *A Guide to College Programs in Culinary Arts, Hospitality and Tourism* (now on CD-Rom), CHRIE (2004) provides a detailed description of tourism programs grouped by types of degrees awarded (2-year, 4-year and graduate), geographic location (United States and International), and specialization (culinary arts, hotel and lodging management, restaurant and food service management, travel and tourism management). The number of institutions, types of qualifications offered, and student enrolments are detailed in Table 1. The CHRIE directory also lists 28 Universities offering post-graduate courses relating to tourism. Up to September 11, 2001, the growth in student numbers in tourism programs had been fuelled by an increasing number of international students. Universities in North America attract over half a million students a year from a broad range of student markets, with mainland China being the major source for international recruitment. Other important markets are Germany, France, Japan and Korea. However, the last few years have seen a significant decline in the number of international applications by prospective graduate international students, especially to the U.S., mainly because of the difficulties faced in securing visas (American Council on Education, 2004).

Table 1
Institutions Offering Tourism and Hospitality Qualifications (CHRIE, 2004)

Qualification offered	Number of institutions	Enrolment
Degree, Certificate and Diploma	63	17,105
Undergraduate	115	35,807
Graduate	68	2,869
TOTAL	176 (Different institutions)	55,781

Curriculum development and articulation agreements

Due to its growing popularity and pervasive presence, tourism education is increasingly gaining a presence at the highest levels of post secondary education. In a 1995 research study, a panel of U.S. tourism industry experts agreed that a 4-year tourism management curriculum should consist of general education, business education, tourism education, and experiential education (Koh, 1995). CHRIE more recently observed that most hospitality and tourism programs consist of four main areas: the major; general education and advanced learning skills; electives; and work experience (CHRIE, 2004). Making up between 25 and 40 percent of the undergraduate curriculum, the major will resemble one of five broad categories or approaches: crafts/skills; tourism; food systems/home economics; business administration; and combinations of these. In many respects, the general education component of the college curriculum is a liberal arts education. This includes the humanities, the social sciences, the arts, and the natural and physical sciences. With advances in technology, knowledge, and social responsibility, advanced learning skills have been expanded to include mathematical precision, statistics, practical ethics, and computer literacy. These skills relate directly to both the individual and the hospitality and tourism major. Electives, like the major, are chosen by the student and provide opportunities for broadening the educational experience. Finally, many tourism and hospitality programs require that students undertake and complete significant work experience in the industry (termed internship, practicum or co-operative education) before they graduate.

The study of tourism draws on a host of disciplines including anthropology, business science, psychology, economics, planning and many others, whereas hospitality tends to focus more heavily on business-oriented sub-disciplines such as marketing, accounting, human resource and information technology. As a result, the philosophical models of tourism and hospitality programs vary from school to school, depending on the overall program emphasis. A recent study of six North American programs (Levy, 2002) shows that tourism and hospitality programs can be located in various schools, although the programs tend to be similar in awarding bachelor degrees in business or hospitality management (see Table 2). The one exception is Texas A&M which awards a Recreation, Park and Tourism Sciences Degree. The concentrations at the University of Las Vegas show how specialized and industry specific modules are becoming.

Table 2
Specifics on Six North American Programs

University	School	Bachelors Degree Awarded	Hospitality/Tourism Concentrations Offered
George Washington University	Business and Public Management	Business Administration	Hospitality Mgmt., Sport and Event Mgmt.
Purdue University	Consumer and Family Sciences	Hospitality and Tourism Management	Lodging Mgmt., Foodservice Mgmt., Tourism Mgmt.
Texas A&M	Agriculture and Life Sciences	Recreation, Park & Tourism Sciences	Park and Nat. Resources Mgmt, Rec. and Park Admin., Tourism Resource Mgmt.
University of Calgary	Business	Bachelor of Commerce	Tourism, Tourism and Marketing
University of Central Florida	Hospitality Management	Hospitality Management	Six Career Tracks including Tourism Management Track
University Nevada-Las Vegas	Hotel Administration	Hotel Admin., Recreation and Leisure Studies	Tourism and six other concentrations ¹

¹Convention, Meeting and Exposition Management, Human Resources, Casino Management, Tourism, Club Management, and Entertainment and Event Management

The same study analyzed the structure of each program, finding that each can be completed in four years with an average of nearly 125 credits (see Table 3). On average, nearly 37 percent of all coursework, or the equivalent of 15 semester-long courses, is grounded in general education. General education or managerial requirements range from 30 percent of the total coursework at the University of Calgary and University of Central Florida to half at Texas A&M.

Hybrid programs

More recently, there has been recognition of the desirability of hiring employees who possess a basic business and liberal arts education in addition to their technical skills. As a response, some institutions have developed hybrid programs especially adapted to students seeking managerial careers rather than simply jobs in the tourism and hospitality sector. One such program in North America is the Bachelor of Hotel and Restaurant Management (BHRM) degree at the

University of Calgary in Canada (Ritchie et al., 2002). The total learning period of this program is 4 years. During the first 2 years, students follow a traditional technical program to ensure they have the entry level skills required by the hospitality industry.

Table 3
Structure of Programs in Six North American Schools

University	Credits Needed	General Education Number	General Education %	Departmental Requirements Number	Departmental Requirements %	Departmental Electives Number	Departmental Electives %	Free Electives Number	Free Electives %
George Washington	120	39	33%	48	40%	9	8%	24	20%
Purdue University	130	48	37%	52	40%	15	12%	15	12%
Texas A&M	129	65	50%	39	30%	15	12%	10	8%
University of Calgary	120	36	30%	54	45%	6	5%	24	20%
U. of Central Florida	120	36	30%	52	43%	18	15%	14	12%
U Nevada-Las Vegas	128	53	41%	46	36%	15	12%	14	11%
<i>Average</i>	<i>124.5</i>	<i>46.2</i>	<i>36.9%</i>	<i>48.5</i>	<i>39.1%</i>	<i>13.0</i>	<i>10.4%</i>	<i>16.8</i>	<i>13.6%</i>

The best graduates from such programs may then pursue a further 2 years of management education, specifically designed for the tourism and hospitality industry. The final product is an individual possessing both the specific technical skills and the broader management education that larger firms in the tourism and hospitality sector find highly attractive. It is only in the last decade that block transfers, or the “2+2 model”, have become palatable to Canadian universities. They generally take the form of an articulation agreement that allows block transfer credits and typically allows diploma graduates direct entry into year three of a four-year University degree program. Of the 17 Canadian universities offering tourism/hospitality related degree programs, nine have variations on this ‘2+2 model’.

Monitoring curriculum and quality issues

It has been suggested that a curriculum must be periodically reviewed to maintain its relevance to the needs of its clientele – the industry and students (Koh, 1995), and there is evidence that universities occasionally conduct research of their own to support program design and evaluation (Milman, 2001; Ritchie and Sheehan, 2001). However, recently there has been some attempt to set and evaluate standards for tourism education externally.

Table 5
Online Degrees in Tourism & Hospitality Management (WorldWideLearn.com, 2004).

Institution	Type of Degree Offered
<u>Ellis College of New York</u> <u>Institute of Technology</u>	Bachelor of Science in Interdisciplinary Studies / Hospitality Management
Touro University	Bachelor of Science in Business Administration - Tourism and Hospitality Management; MBA in Hospitality Management
The George Washington University	Accelerated Master of Tourism Administration
Herkimer County Community College	Associate in Applied Science in Travel and Tourism
Southern New Hampshire University	Master of Science in Hospitality Administration
Sullivan University	Bachelor of Science in Business Administration degree with a concentration in Hospitality Management
Texas Tech University	Master of Science in Restaurant, Hotel and Institutional Management.
University of Guelph	MBA in Hospitality and Tourism
The University of Houston	Executive Master of Hospitality Management (M.H.M.)
University of Wisconsin-Stout	Master of Science in Hospitality and Tourism

The World Tourism Organization (WTO) for example, is the most widely recognized and leading international organization in the field of travel tourism, and has made significant efforts to set quality standards for tourism education. The newly developed accreditation program for tourism education institutions (TedQual) has attracted some institutions in North America to certify their tourism and hospitality courses. There are also some who suggest that tourism curriculum

should be changing in response to world events that have occurred this century. Go (2004) discusses the increasing calls for global tourism education in American schools that will foster international knowledge and skills. In addition, he says that the knowledge needed to compete under conditions of complexity is becoming more diverse as the rate of change in tourism markets occurs at an increasingly rapid pace. Dwyer (2004) also suggests that tourism education must prepare students to play a leadership role in an industry that is undergoing rapid changes on both the demand and supply sides.

Teaching methods and assessment

While the standard lecture still prevails as the main teaching method, advances in information technology have created alternatives for tourism education. One such development is the increased emphasis on multimedia use in the classroom. But learning to design and develop multimedia courseware is a multifaceted and demanding task often insurmountable for most faculty members. McNeil and Chernish (2001) suggest that a multimedia design team can overcome these barriers. Some authors have discussed how virtual enterprises can assist in tourism education (Hill and Schulman, 2001; Marshall, 2001; Zapalska et al. 2003). A virtual enterprise is an inter-disciplinary business simulation, where students use technology to trade products and services through a global e-commerce network of more than 3,000 firms. Sigala (2002) suggests that although an increasing number of tourism and hospitality educators are incorporating the internet into their instruction, only a few are fully exploiting the internet's capabilities to transform and extend their pedagogical models. Table 5 lists the number of online tourism and hospitality degrees listed in a directory of online education.

Integration of research and teaching

In North America, tourism education and research are often mentioned together because it is necessary for academics to be involved in both activities in many educational institutions. Research in tourism and hospitality has matured over the last few decades, fuelled by a proliferation of texts and journals specifically related to the subject. A recent inventory yielded a count of 69 journals (Hudson, 2004) and tourism education can only benefit from these research advances. Research efforts of a growing, but still small, community of researchers, have heightened the status of tourism (Jafari, 2003). Ritchie (1993) has commented that there are too few programs designed to provide doctoral level qualifications for individuals seeking a systematic focus on tourism. Similarly, he suggests there are too few short programs that seek to provide a mechanism for upgrading of teaching and research skills in the field. It is questionable whether too much has changed since these proposals were made in the early 1990s. Some suggest that there is still a shortage of suitably qualified tourism educators. Jafari and Aster (1988) proposed that too few Universities offer tourism doctoral degrees because of the persistence of disciplinary inflexibility which allows only the 'traditional' dissertation foci. However, in more recent years, many U.S. Universities have expanded their existing doctoral programs in such fields as education, recreation, and urban/regional planning to include tourism (Jafari, 2003).

Professional Associations

Professional Associations are an important part of establishing tourism's academic presence, and tourism and hospitality educators in North America have several domestic and international associations they can participate in. One of the oldest is the Travel and Tourism Research Association (TTRA). It is the world's largest travel research organization made up of academics and professionals devoted to improving the quality, value, scope and acceptability of travel research and marketing information. Approximately 20 percent of the TTRA membership are tourism and hospitality educators. The International Society of Travel and Tourism Educators is a smaller, newer organization made up of universities, colleges, and proprietary schools. It seeks to promote the development and exchange of information related to tourism education and research. The International Academy for the Study of Tourism is another relatively new organization of multi-disciplinary scholars committed to the advancement of knowledge in the field of tourism. Another influential association is CHRIE, who publish the *Hospitality and Tourism Research Journal*. Finally, the Society of Park and Recreation Educators is a branch of the National Recreation and Park Association. In addition to these organizations, other professional associations (such as the American Marketing Association) are creating sections or special interest groups so that members interested in tourism can network and interact.

Interface with the tourism industry

Many researchers have focused their attention on the role that tourism studies should play with regard to serving the needs of the travel and tourism industry (Cooper and Shepherd, 1997; Leslie and Richardson, 2000). In 1991 both Cotton and Leslie commented that the actual fit between education provision and demand for employers in tourism and hospitality was a poor one. Haywood and Maki (1992) suggest that there are differing expectations between employers and the education sector in that employers emphasize practical skills and general transferable skills, whereas educators seek more conceptual and tourism-specific materials. They contend that this has resulted in a gap characterized by poor levels of communication between the two groups; a lack of involvement of educators in the industry; and industry's role in education (through advisory bodies, etc.) often being poorly defined. There have also been criticisms of the tourism industry itself not

recognizing the value of tourism research. Rarely does the industry contribute to its application and development (Jafari, 2003). No matter what approach it takes, a hospitality and tourism education program is still no substitute for experience. The industry seldom hires management-level people who lack substantial, varied, and responsible work experience, regardless of a college degree (CHRIE, 2004). It is important that prospective managers have a solid commitment to a career in hospitality and tourism and that they have experiential knowledge of the industry. Therefore, as mentioned previously, many programs now require that students undertake and complete significant work experience in the industry before they graduate. Some have also introduced optional programs where students are personally mentored by industry executives.

CONCLUSION

As for the future, Jafari (2003) predicts that the cumulative process of building a scientific foundation for tourism will continue, with a greater recognition of tourism across campuses and departments. However, this paper has highlighted some concerns for those involved in tourism education in North America, such as the need for curriculum to be changing in response to world events; the gap between industry demands and education providers; the decline in international applications by prospective graduate international students; and a subsequent slowdown in graduate applications further exacerbating the shortage of suitably qualified tourism educators. On a more positive note, further enhancements to curriculum, including diploma to degree articulations, innovative delivery formats, quality control of programs, and the closer integration of leading research and industry best practices give cause for future optimism that the field of tourism and hospitality will remain relevant both as an area of instruction and as a field of investigation.

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CUSTOMERS' IDENTIFICATION OF ACCEPTABLE WAITING TIMES IN A MULTI-STATE RESTAURANT SYSTEM

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ABSTRACT

The problem of waiting is critical in service encounters. No customer feels satisfied when s/he has to wait too long. Therefore, identification of acceptable waiting times is a good starting step in effective wait-time management in a restaurant. Thus, this study was designed to provide restaurant managers with insights on acceptable waiting times for customers. Results showed that the acceptable waiting times vary depending on the service process stages and respondents' expectation levels (satisfactory, unsatisfactory, and very unsatisfactory). Participants placed different levels of importance on each stage of wait, and gender and age categories influenced their responses.

Key Words: customer service, waiting time, customer expectation

INTRODUCTION

Service quality, as perceived by customers, plays a critical role in the long-term success for most service firms. Satisfied customers that return to the service provider and remain loyal are an essential component for a profitable firm. However, customer service becomes challenging due to the characteristics of service, including intangibility, perishability, simultaneity, and heterogeneity (Sasser, 1976). The potential problems that may affect the customer's evaluation of service quality have been identified by Parasuraman, Zeithaml, and Berry (1985). These problems are the gaps 1) between customer expectations and management perceptions of those expectations, 2) between management perceptions of customer expectations and the firm's service quality specifications, 3) between service quality specifications and actual service delivery, 4) between actual service delivery and external communications about the service, and 5) between customers' expected service and perceived service.

The gaps can be explained using a typical restaurant setting where customers wait when the system lacks capacity and receive immediate service when the system has excess capacity. Customers expect some level of certainty about the service, for example, the length of their wait. The restaurant operator assesses the customers' expectations, translates the customers' needs into adequate service specifications, and produces capacity. However, when the capacity produced does not meet customer demand, a customer begins the service in a queue and perceives the capacity to be insufficient (Corsten & Stuhlmann, 1998). This poor start may negatively influence the customer's assessment of subsequent services, and the entire experience. Thus, a good starting point for managing service is the study of the customers' acceptance of waiting times, which can influence the customer's assessment of service.

The problem of waiting is critical in service encounters. No customer feels satisfied when s/he has to wait too long. Customers' acceptance of waiting times in a restaurant varies from customer to customer or from restaurant to restaurant. For instance, they expect to wait less in a fast-food restaurant whereas they are more tolerant of longer waits in a casual dining restaurant. Furthermore, customers may place different levels of importance on their waiting experiences for each service stage: arriving, greeting, seating, ordering, serving, receiving the check, and paying. Therefore, managers must set standardized service levels to provide consistency during service. For example, quick service restaurants attempt to reduce waiting time for ordering to less than one minute and receiving food to less than three minutes (Davis, 1991; Hueter & Swart, 1998; Lawson, 1994). Thus, identifying a service level that meets customer expectations, and achieving it by managing capacity, can improve customer service.

This study attempts to answer the following questions:

- Does customers' acceptance of waiting times in a multi-stage service process of a casual restaurant system differ based on the stage of service?
- Which stage of waiting is considered the most important and which is the least important?

- Does gender or age make a difference in customers' acceptance of the waiting times and in their rankings for the waits of different stages?

LITERATURE REVIEW

Service Quality: Parasuraman, Zeithaml, and Berry (1985) defined service quality as the extent of difference between customer expectations of a service and their perceptions of the service delivered. Service quality is perceived and assessed by customers during the service delivery process. Customers are satisfied with a service when perceptions of service exceed expectations of service desired. However, when expectations are not met, service quality is unsatisfactory. Since service quality is judged by customers using multiple dimensions such as reliability, responsiveness, assurance, empathy, and tangibles (Parasuraman et al., 1985), measuring service quality becomes challenging. Among diverse dimensions of service quality measurement, the operations perspective focuses on customer waiting experience; the duration of customer waiting is directly associated with capacity. Long waiting times due to a lack of capacity will result in customer dissatisfaction and dissatisfied customers may leave before they join the queue (balking) or before being served (reneging).

Customers' expectations of service level

Initial expectations set the thresholds that will determine how satisfied customers are after a service encounter. Thus, identifying customers' expectations of service is a good starting point for providing quality service. Parasuraman et al. (1991) defined two levels of expectation: desired and adequate. Desired service is the level of service a customer believes can and should be delivered and adequate service is the level of service a customer considers acceptable. The authors pointed out that firms must exceed not only the adequate service level but also the desired service level. Exceptional service can intensify customers' loyalty. In 1996, Zeithaml et al. pointed out that the greater customers' perceptions of a firm's overall service quality, the more likely the customers are to engage in behaviors beneficial to the firm's strategic advantage.

However, customer expectations are complex and dynamic (Harvey, 1998). High quality service delivery can shape customer expectations. For example, customers who received high-quality service delivery raised their customer expectations for the next service encounter (Garfein, 1987; Pitt & Jeantrout, 1994). Thus, these researchers suggest that organizations should deliver exactly what they promise every time for their long term benefit. They emphasize providing a consistent level of service. Furthermore, Walsh (2000) found that hotel and restaurant customers remembered only exceptionally good or bad experiences through simple transactions. The author thus raised a concern for managers who may waste money and effort for outstanding service when customers recognize such service only on the rare occasions.

Customers' expectations of waiting experiences in restaurants

As a starting point of service quality management, customer expectations should be derived from customer opinions so that the service providers can establish the service requirements accordingly. When customers enter a service system, they have specific expectations regarding an acceptable wait that leads to satisfaction (Taylor, 1994). Thus, the goal of restaurant managers becomes to provide an acceptable level of customer satisfaction by providing customers with acceptable waiting times. However, there is no absolute level of acceptable customer satisfaction. Customer satisfaction is relative depending on the context of the service operation. For an upscale restaurant, for example, it is likely that customers are less satisfied when waits are either too short or too long. Customers may feel rushed when they do not have enough time to study the menu and make a decision about what they want to order, whereas they may feel frustrated when service is too slow (Davis, Aquilano, & Chase, 2003). In this sense, zero waiting time might not be the best for customers. Thus, it is important to identify service criteria that are specific for the firm so that managers can provide a consistent level of customer satisfaction, which may result in a variable waiting time that is situation dependent (Davis & Vollmann, 1990). For example, the factors that can influence customer satisfaction with their wait experiences are the firm-controlled factors, such as type of queue, comfort, certainty, and fairness of wait, business of restaurant, location and staff level; and customer-controlled factors that include time constraint, frequency of visits, mood, value of service. (Hornik, 1984; Maister, 1985; Davis & Heineke, 1994).

Customers place different values on waits during the multi-stage service process in restaurants. No research studies were found on the identification of customers' expectations of the waits in a casual restaurant although the multi-stage waits were recognized in a study by Jones and Dent (1994). However, researchers investigated the waits in a fast-food restaurant and customers' responses toward the waits. In a study of two-customer waits, Davis and Maggard (1990) found that customers placed more importance on the waiting time with the initial service than with the subsequent service in a two-stage service process of a fast-food restaurant. The first was the initial wait in line prior to placing an order whereas the second was the wait for the order to be filled. In contrast, Zhao, Lau and Lam (2002) found that waiting time

at the food-order taking stage has a more significant impact on customer satisfaction. The authors argued that this result was ascribed to the way the customers have to wait. These results also prove that customer satisfaction with their waits is environment specific and firm specific.

This study explored customer acceptance and importance of waits at different stages based on the following alternative hypotheses:

H_{1-1a}: There are significant differences in customers' acceptance of satisfactory waiting times depending on the stage of the service-delivery process in a casual restaurant.

H_{1-2a}: There are significant differences in customers' acceptance of unsatisfactory waiting times depending on the stage of the service-delivery process in a casual restaurant.

H_{1-3a}: There are significant differences in customers' acceptance of very unsatisfactory waiting times depending on the stage of the service-delivery process in a casual restaurant.

H_{2a}: There are significant differences in rankings for the six waits according to the importance of the wait in a multi-stage service-delivery process in a casual restaurant. (i.e.: at least two of the six rankings represent different median values.)

H_{3a}: Age and gender indicate significant differences in customers' expectations of the waiting times.

H_{4a}: Age and gender indicate significant differences in the rankings toward the six waits in a casual restaurant.

METHODOLOGY

Instrument: A questionnaire was designed to capture customers' acceptance for waiting experiences in a casual restaurant. The survey described a scenario of a customer-waiting experience in a casual dine-in restaurant setting while eliminating uncontrollable factors that might bias customers' attitude toward waiting times. For the first section, three different levels of acceptance for waiting times in various restaurant processes were categorized as satisfactory, unsatisfactory, and very unsatisfactory.

Satisfactory wait: the waiting time is acceptable and customers are pleased with the waiting time. Customers' behavior will not be influenced by the wait.

Unsatisfactory wait: the waiting time is not acceptable and customers are upset with the waiting time, but their behavior will not be influenced.

Very unsatisfactory wait: the waiting time is very unacceptable and customers are very upset with this service, so they will call for the manager or leave the service facility.

Survey respondents were asked how many minutes they would wait at each stage of service for a satisfactory, unsatisfactory, or very unsatisfactory wait. The six service stages are shown in Figure 1. In the second section of the survey, the respondents' importance of each wait at each stage was recorded. In the last section of the survey, data on customers' dining-out habits and their demographics were collected. The survey questionnaire was evaluated by an expert panel of faculty members in the hospitality management program at a university located in the eastern United States and edited based on their recommendations.

Sample: An email list of alumni association members from one department at a university in the eastern United States was obtained to distribute the online survey. The alumni were considered to be potential restaurant customers that were easily accessible via the Web. A letter was sent to alumni requesting their participation. Subjects who agreed to participate were given a website URL where the survey was located. The responses were anonymous and confidential. Institutional Review Board (IRB) approvals for the study were obtained.

Responses received within one week after sending the invitation were included in the analysis. No follow-up email was sent as the number of surveys received was determined to be sufficient for statistical analyses. The on-line survey was cost-effective because of the elimination of the costs of paper, postage, and other administrative costs (Zikmund, 2003).

RESULTS AND DISCUSSION

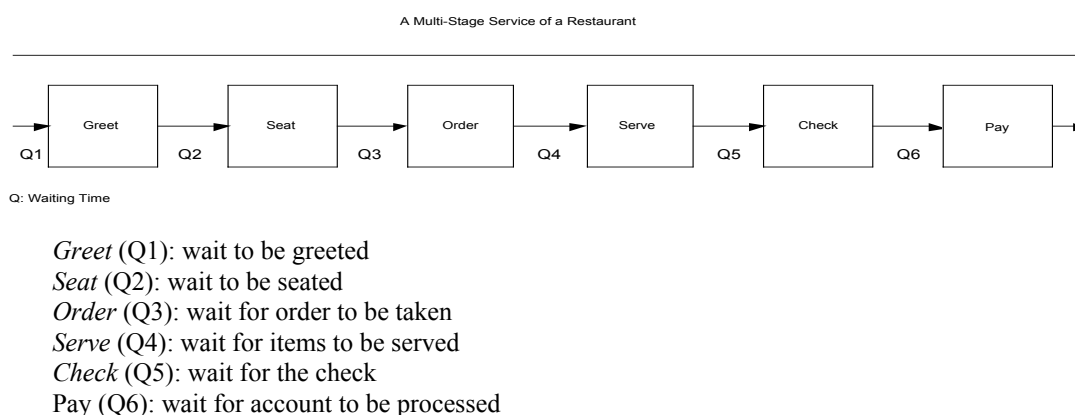
Results from the online survey provided answers for the research questions. The total number of subjects who responded was 278 for a response rate of 16.25%. Of the 270 subjects that were used for the analysis, 125 were males and 142 were females. Their mean age was 38. The first set of hypotheses were:

H 1-1a: There are significant differences in customers' acceptance of satisfactory waiting times depending on the stage of the service-delivery process in a casual restaurant.

H 1-2a: There are significant differences in customers' acceptance of unsatisfactory waiting times depending on the stage of the service-delivery process in a casual restaurant.

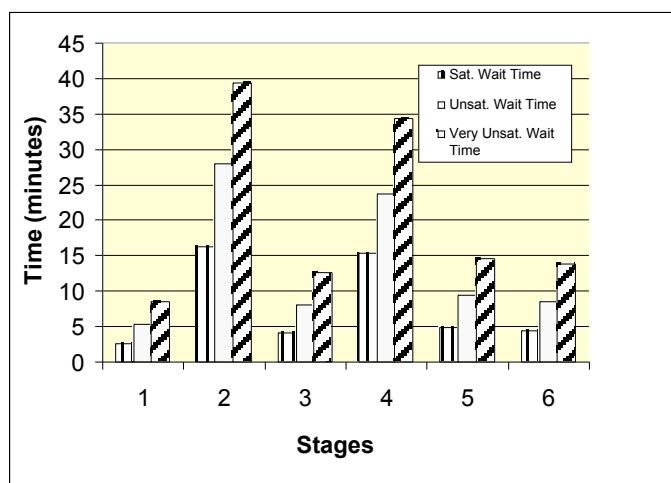
H 1-3a: There are significant differences in customers' acceptance of very unsatisfactory waiting times depending on the stage of the service-delivery process in a casual restaurant.

Figure 1
Multi-Stage Service in a Restaurant



Using ANOVA, significant differences were found in customers' expectations of satisfactory, unsatisfactory, and very unsatisfactory waiting times depending on the stage of the service-delivery process in a restaurant ($p < 0.05$, $p < 0.001$, and $p < 0.001$, respectively).

Figure 2
Acceptance of Waiting Times in a Six-Stage Service-Delivery Process



See Figure 2. Mean values indicated that respondents believed that waiting 2.6 minutes for the greeting stage is acceptable and they are still pleased with the wait. A waiting time longer than 5.3 minutes is unsatisfactory, although their behaviors will not be influenced as long as the wait is shorter than 8.5 minutes. This interpretation will be applied for the rest of the five stages.

Post-hoc tests were conducted for pair-wise multiple comparisons among the acceptable times for waiting for different stages using Tukey's b test. Among the acceptable satisfactory waiting times, respondents indicated the shortest waiting time for greeting (Table 1 (a)). The acceptable satisfactory waiting times for ordering, receiving the check, and paying were significantly different from the others. The accepted waiting time for serving was significantly different from others with a second largest mean value. Respondents were most tolerant with the wait for seating among those for all the six stages. The expectations for unsatisfactory and very unsatisfactory waiting times showed the same pattern as satisfactory waiting time (see Table 1 (b) and Table 1(c)).

Table 1
Post Hoc Tests for Expectations for Satisfactory, Unsatisfactory, and Very Unsatisfactory Waiting Times

		(a) Satisfactory Waiting Times (Min.)			
Stages	N	1	2	3	4
1	270	2.5704			
3	268		4.0400		
6	269		*4.3843		
5	269		*4.8848		
4	268			15.3321	
2	268				16.2500

		(b) Unsatisfactory Waiting Times (Min.)			
St ages	N	1	2	3	4
1	269	5.2807			
3	270		*8.0741		
6	269		8.4740		
5	270		*9.4889		
4	269			#23.7193	
2	268				28.0187

		(c) Very Unsatisfactory Waiting Times (Min.)			
St ages	N	1	2	3	4
1	270	8.5222			
3	265		*12.6736		
6	262		*13.7958		
5	268		*14.6549		
4	261			#34.3793	
2	268				#39.3918

Homogeneous Subset for alpha = .05

* Gender Differences at the Significance Level, 0.05 ($p < 0.05$)

Age Differences at the Significance Level, 0.05 ($p < 0.05$)

The second hypothesis was: There are significant differences in rankings for the six waits according to the importance of the wait in a multi-stage service-delivery process in a casual restaurant (i.e.: at least two of the six rankings represent different median values). Due to the characteristics of the rankings, data are strongly correlated. Thus, Friedman's test, which is a nonparametric test employed with ordinal data, was used. If the results of the Friedman test are significant, it indicates that at least two of the six medians differ significantly. The data met all the assumptions for the Friedman test. Analysis supported the alternative hypothesis that at least two of the six rankings represent different median values ($p < 0.001$).

For further analysis, simultaneous pairwise comparisons were used based on the minimum required difference between the mean ranks of two samples in order for them to differ at the prespecified level of significance ($=0.05$). As shown in Table 2, the results indicated that greeting and ordering stages are the most important and the rankings are significantly different from the others. The ranking for the serving stage was significantly different from all others except

ordering and seating stages. The checking and paying stages were least important to the respondents. In order to efficiently represent the importance of each wait, weights were assigned to the six stages according to the ranks taken by the respondents. The relative importance of the six stages of waits is shown through the weights that are summed to 1 (Table 2).

Table 2
The Ranked Importance of Each Wait and Weights Assigned to the Six-Waits

Stage	Mean Rankings	Overall Weight	Weight for Males	Weight for Females
Q1:Greeting	2.58	0.21	0.205	0.22
Q2:Seating	3.41	0.16	0.18	0.15
Q3:Ordering	2.68	0.21	0.195	0.22
Q4:Serving	3.09	0.18	0.175	0.18
Q5:Receiving the Check	4.38	0.13	0.13	0.12
Q6:Paying	4.86	0.11	0.115	0.11
<i>Total</i>		1	1	1

The third hypothesis stated: Age and gender indicate significant differences in customers' expectations of the waiting times. Using ANOVA, significant differences occurred between female and male in the accepted satisfactory waiting times (for the stages of receiving the check and paying), unsatisfactory waiting times (for the stages of ordering and receiving the check), and very unsatisfactory waiting times (for the stages of ordering, receiving the check, and paying) ($p < 0.05$). For those stages, males were less tolerant than females (Table 1). However, there was no interaction between gender and stages. Unlike gender, there were interactions between age categories and stages for unsatisfactory waiting times and for very unsatisfactory waiting times ($p < 0.05$ and $p < 0.001$, respectively). For unsatisfactory waiting time, the younger the subjects were, the more tolerant they were with the wait for the stage of serving. For very unsatisfactory waiting time, the younger the subjects were, the more tolerant they were with the waits for the stages of seating and serving ($p < 0.05$) (Table 1).

The last question of interest was whether the ranking for wait stages was different by gender or age. In this case, ANOVA could not be used because the assumptions would be strongly violated due to the characteristics of ranking data. There is no standard method for this test. Therefore, data were separated by gender and by age, and then a Friedman test was performed on each data set although there was not a statistical test to check differences among the groups. As a result of the Friedman test, two gender groups showed similar patterns in their rankings and the rankings from females and males were converted to weights, which are shown in Table 2. Specific age groups showed somewhat different patterns from the overall pattern. The group over 60 years old placed more importance on the stage for seating than ordering where other groups thought the wait stage for ordering was more important.

CONCLUSION AND IMPICTATIONDS

This study emphasizes the first step for wait-time management, i.e. the identification of customers' acceptable waiting times for three service levels. Once firms identify the acceptable waiting times, they can satisfy customers by setting up and attaining the service standards. This study was beneficial in terms of showing how to measure customers' acceptance for waiting times in this context. Customers' acceptance for waiting experiences in a restaurant was measured in terms of waiting times as well as the importance of the waits for the multiple stages.

For a restaurant system where multiple stages of service-delivery processes take place, customers' acceptance of waiting times differ for those stages, and customers place different importance on the waits for those stages. Results of this study show that customers will accept different waiting times for the stages. In addition, their waiting times vary depending on what service level they are willing to accept: satisfactory, unsatisfactory, and very unsatisfactory. Customers can tolerate longer waits at the seating or serving stages, but not those for greeting, ordering, or paying. They are more tolerant with the wait for food once they order the food in a casual restaurant. However, they need to be greeted as soon as possible once they arrive in the restaurant and need to order as soon as possible once they are seated. Customers are less tolerant with the wait for paying, perhaps because this stage influences their departure time.

Another finding is that customers' gender and age can be indicators for the managers to assess customers'

expectations for the waits in a restaurant. Depending on gender and age, customers may place different values for the waits for service process stages.

These findings provide restaurant managers with insights for operational strategies that they can apply. First, managers should recognize the different accepted waiting times for each stage. Through the identification process, managers can set the threshold levels for the waiting times that please customers or dissatisfy customers, without negatively influencing customers' behavior toward the service firm. Second, managers can identify the importance of each wait for each stage in a multi-stage service-delivery process from customers' perspective. Based on the acceptable level, managers can plan staffing and resource allocation. In capacity planning, the priority for capacity should be placed on the stage that customers think most important. Third, managers should recognize that customer demographics could be good indicators for identifying the acceptable times. One caution needs to be made when interpreting the acceptable waiting time. The perceived waiting time could be different from the actual waiting time. Even though a customer says that he or she expects one minute waiting for ordering, one minute may be perceived to be longer in reality. Managers should recognize that acceptable waiting times vary from firm to firm. They must obtain their own customers' acceptable times for the firm's service. This study provides managers with the method on how to obtain customers' acceptability for the service.

Future study might be extended to the real setting and further research needs to be focused on the site-specific factors that might influence customers' expectations. Moreover, as an extension of this study, a study needs to be done to see how managers can apply the information of customers' expectations in their planning and allocating capacities.

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DEVELOPING A PERFORMANCE CRITERIA MODEL FOR SCHOOL FOODSERVICE: AN APPLICATION OF ANALYTIC HIERARCHY PROCESS(AHP)

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ABSTRACT

This study used the Analytic Hierarchy Process (AHP) to develop a performance criteria model for achieving the overall Child Nutrition Program (CNP) goal for school foodservice. Results indicated that customer satisfaction was the most important category in achieving the overall CNP goal, followed by financial management, meal quality, program management, and operations management. The performance criteria model can be used for strategic decision making in school foodservice. Priorities of criteria in the model can be customized to school districts with different goals by replicating the pairwise comparison process of AHP.

Key Words: performance criteria, school foodservice, AHP

INTRODUCTION

School foodservice directors can increase their effectiveness and efficiency in managing Child Nutrition Programs (CNPs) by improving their decision-making processes. Decision making, one of the most important roles of directors, requires consideration of priorities within the overall operation and, often, compromises (Martin & Conklin, 1999; Spears & Gregoire, 2003). One way to improve the decision-making process is to develop performance criteria in terms of goal achievement and make decisions based on these criteria (Globerson, 1985). Performance criteria developed in terms of goal fulfillment can address efficiency (Andersson, 1996).

Comprehensive criteria need to be considered in the decision-making process for achieving optimal operational efficiency, the best possible food quality, and effective resource utilization. Although numerous criteria in foodservice operations have been examined, there is a gap in knowledge of constructing comprehensive performance criteria and identifying weights of these criteria relative to overall goal achievement. To address this gap, the purposes of this study were to develop a comprehensive performance criteria model based on the overall CNP goal and identify the relative importance of criteria for goal achievement.

LITERATURE REVIEW

The literature on organizational performance indicated three perspectives: the goal approach (Etzioni, 1964), the systems resource approach (Yuchtman & Seashore, 1967), and the process approach (Steers, 1977). The goal approach (Etzioni, 1964) is most appropriate for school foodservice operations because there is a clearly defined overall goal of CNPs – to serve nutritious and appealing foods to help safeguard the health and well-being of the nation's children. Achieving this goal is required and supported by related legislation such as the National School Lunch Act of 1946, the Child Nutrition Act of 1966, and the Healthy Meals for Americans Act of 1994 (Martin & Conklin, 1999; Pannell-Martin, 1999). In addition, goal attainment is important in CNPs because they influence a significant number of children who participate in these programs. According to the U.S. Department of Agriculture (USDA, 2003a), the number of lunches served through the National School Lunch Program (NSLP) has grown to 28 million lunches per school day in 2002, which corresponds to approximately 42% of all children between ages 2 and 18 years (U.S. Census Bureau, 2000). The average number of daily participants in the school breakfast program was 8.2 million in fiscal year 2002 (USDA, 2003b).

Performance criteria developed in terms of goal achievement can be used to improve the decision-making process (Globerson, 1985), address efficiency (Andersson, 1996), and help school foodservice directors make strategic decisions that result in achieving the overall goal of CNPs. However, performance criteria specific to school foodservice goal achievement have not been developed and prioritized.

Many studies have examined foodservice operations' efficiency by focusing on variables affecting productivity (Brown & Hoover, 1990; Clark, 1997; Lieux & Manning, 1991; Lieux & Winkler, 1989; Manning & Lieux, 1995; Matthews, Zardain, & Mahaffey, 1986; Mayo, Olsen, & Frary, 1984; Yung, Matthews, Johnson, & Johnson, 1981). Results of these studies do not provide a basis upon which to construct comprehensive performance criteria in terms of the overall CNP goal achievement or to identify relative weights of these criteria. Productivity measures used in these studies may not reflect the goal achievement of a school foodservice operation, because these measures did not take into consideration the quality aspect of the final product. Quality is an important part of the overall CNP goal because it affects student participation in school meals programs (Hutchinson, Brown, & Gilmore, 1998; McConnell, Matta, & Shaw, 1997). Therefore, high productivity alone does not guarantee achievement of the overall CNP goal, and factors affecting productivity do not reflect the whole picture of school foodservice operations.

Relative weights of factors impacting overall goal achievement have not been included in previous studies. Without these weights, it is difficult to make effective decisions on such matters as allocating resources or selecting food production systems. In order to make effective decisions, limited resources should be prioritized based on performance criteria and relative weights of these criteria with respect to achieving the overall CNP goal.

The AHP is a useful tool for evaluating complex multi-attribute alternatives involving subjective or intangible criteria (Armstrong, Compton, Mullens, & Swart, 1994; Handfield, Walton, Sroufe, & Melnyk, 2002), such as performance criteria for a foodservice operation. A school foodservice operation may have multiple and potentially conflicting performance criteria. In addition, these criteria may include intangible criteria, such as customer satisfaction or service quality, as well as tangible criteria such as revenue or profit. When making a decision among alternatives, these multiple and potentially conflicting performance criteria should be considered. Thus, the AHP is an appropriate method to use in developing a comprehensive performance criteria model for school foodservice operations.

METHODS

The application of the Analytic Hierarchy Process (AHP)

There are three essential steps in the application of the AHP to a decision problem: 1) decomposing a general decision problem into a hierarchy, 2) determining priorities of elements at each level of the hierarchy, and 3) evaluating decision alternatives in terms of elements in the hierarchy. To decompose a problem, such as achieving the overall goal of Child Nutrition Program (CNP) into a hierarchy, one can begin with the overall goal and brainstorm specific performance criteria that need to be met in order to achieve the goal. For each performance criterion, one can then list sub-criteria that need to be met in order to perform each criterion well. The result of decomposition will be a hierarchical structure with the overall goal on top and the particular criteria that need to be met in order to achieve the goal below it. In this study, a modified Delphi process was used to decompose the overall CNP goal and collect pairwise comparison data.

To determine priorities of the elements at each level of the hierarchy, each criterion (C_i) identified by decision makers or experts in a problem area needs to be compared in every possible pair (Saaty, 1980). As a result, each criterion is assigned a relative importance. These relative importances are then used to construct a pairwise comparison matrix A illustrated as follows:

$$A = (a_{ij}), \quad (i, j = 1, 2, \dots, n)$$

If $a_{ij} = \alpha$, then $a_{ji} = 1/\alpha$, $\alpha \neq 0$, hence A is a reciprocal matrix.
 If C_i is judged to be of equal importance as C_j , then $a_{ij} = 1$.
 If C_i is judged to be of absolute importance compared to C_j , then $a_{ij} = 9$.

Then, priority vector w is calculated as $Aw = \lambda_{\max}w$, where λ_{\max} is the largest eigenvalue of A . The consistency index (CI) is calculated to estimate the consistency of pairwise comparisons: $CI = (\lambda_{\max} - n)/(n - 1)$. Another indicator of consistency is the consistency ratio (CR), which is the ratio of CI to the average random index (RI). RI is a randomly generated reciprocal matrix on a scale from 1 to 9, with reciprocals forced. A CR of .10 or less is considered acceptable (Saaty, 1980, 2003). The software package, Solution Builder (Hwang, 2001), was used to calculate priority vectors and CRs.

Study design

This study was designed to decompose the overall CNP goal into performance criteria using a modified Delphi process and identify relative weights of each criterion. A total of two rounds of survey was conducted during the modified Delphi process. A third survey was distributed to identify relative weights of performance criteria. Participants were composed of 15 school foodservice directors holding leadership positions at a national or state level in the American School Food Service Association and managing districts with 10,000 or more students.

Questionnaire 1 was composed of an open-ended question asking directors to list all performance criteria they would use to evaluate a school foodservice operation in terms of CNP goal achievement. In addition, general information, such as location and size of the school district and the length of the director's experience in school foodservice, was requested. Criteria obtained through responses to questionnaire 1 were tabulated and duplicate criteria were eliminated. Five local school foodservice directors who were not included in the Delphi expert panel were asked to sort the criteria into categories. These directors were asked to review all criteria, sort them into categories of related items, and add or remove criteria. The purpose of the categorization was to form criteria into a hierarchical structure. In questionnaire 2, the Delphi panel reviewed compiled performance criteria in a hierarchical structure and responded whether they agreed with the hierarchical structure and whether items needed modification. The hierarchical structure was modified by incorporating responses to questionnaire 2, resulting in the final structure of the performance criteria model for school foodservice. In questionnaire 3, the expert panel compared performance criteria in all possible pairs using the pairwise comparison scale summarized in Table 1 (Saaty, 1980). All questionnaires were mailed to the expert panel with a cover letter and a business reply envelope. Pairwise comparisons formed pairwise matrices for each level of hierarchical structure. For each matrix, a consistency ratio (CR) and a priority vector were calculated using the Solution Builder software package (Hwang, 2001).

Table 1
Pairwise comparison scale for the AHP

Intensity of importance	Definition	Explanation
1	Equal importance	Two criteria contribute equally to the objective
3	Weak importance of one over another	Experience and judgment slightly favor one criterion over another
5	Essential and strong importance	Experience and judgment strongly favor one criterion over another
7	Very strong and demonstrated importance	A criterion is favored strongly over another, its dominance demonstrated in practice
9	Absolute importance	The evidence favoring one criterion over another is of the highest possible order
2, 4, 6, 8	Intermediate values between adjacent scale values	When compromise is needed
Reciprocals of above nonzero numbers	If criterion i has one of the above nonzero numbers assigned to it when compared with activity j, then j has the reciprocal value when compared with i	A reasonable assumption
Rational	Ratios arising from the scale	If consistency were to be forced by obtaining values to span the matrix

Note: From *The Analytic Hierarchy Process* (p. 54) by T. L. Saaty, 1980, New York, NY: McGraw-Hill Book Co.

RESULTS AND DISCUSSION

Profile of the Delphi expert panel

Of the 15 school district foodservice directors, 11 directors responded to round 1, 8 directors to round 2, and 6 directors to questionnaire 3. All had at least a bachelor's degree and more than 16 years of experience in school foodservice. Their school district size ranged from 12,700 to 61,000 enrolled students. Six directors worked in a school district located in a metropolitan area, four in a suburban area, and one in a rural area. There were no systematic differences between respondents and non-respondents in the Delphi expert panel. Among respondents and non-respondents, size and location of school districts varied without specific trend in one group. In addition, no significant trend was detected from the directors who responded to questionnaire 1 or questionnaires 1 and 2 compared to directors who responded to questionnaires 1, 2, and 3.

Performance criteria and development of the performance criteria model

Comprehensive performance criteria were identified and organized under five categories by school foodservice experts: 1) customer satisfaction, 2) meal quality, 3) financial management, 4) program management, and 5) operations management. Operations management was divided into four sub-categories: 1) facilities, 2) food production, 3) human resources management, and 4) marketing program.

Relative weights of performance criteria

Overall pairwise comparisons of the five categories were consistent (CR= .03). The pairwise comparisons of sub-categories for operations management also were consistent (CR= .01). According to the priorities of the five categories, customer satisfaction (.32) was rated as most important followed by financial management (.19), meal quality (.19),

program management (.16), and operations management (.14) to achieve the CNP goal. In the operations management category, human resources management (.40) was rated most important. This corresponds with challenging labor issues common in school foodservice. Facilities (.29) and food production (.25) were the next most important sub-categories under operations management. Marketing (.06) was rated least important. Table 2 summarizes priorities of categories and sub-categories.

Table 2
Priorities of the performance criteria

Customer Satisfaction (CR=.04)	Priority
Students' satisfaction with the meal program	.44
Service quality	.32
Parents' satisfaction with the meal program	.13
School administrators' satisfaction with the meal program	.07
FS staff's satisfaction with the meal program	.04
Financial Management (CR= .13)	
Cost management	.32
Participation in school meals	.32
Inventory management	.16
Revenue management	.13
Meet budget guidelines	.06
Meal Quality (CR=.08)	
Menu variety	.36
Meal temperature	.20
Meal flavor	.20
Meal appearance	.18
Meal texture	.06
Program Management (CR= .06)	
Meals consistent with the meal pattern requirements	.33
Free and reduced-price meal application management	.29
Effective record keeping system	.23
Availability of written standards and policies	.11
Nutrition education	.03
Operations Management (CR= .01)	
Human Resources Management (CR= .40)	
Employee job satisfaction	.33
Productivity	.32
Staff development	.26
Accident management	.08
Facilities	
Equipment management	.50
Storage capacity	.50
Food Production (CR= .08)	
Safe food handling practices	.38
Production quantity management	.24
Use of standardized recipes	.22
Safe and sanitary production environment	.17
Marketing Program	

CONCLUSION

Using the AHP, the ultimate goal of school foodservice operations – achieving the overall goal of CNP – was decomposed into comprehensive performance criteria and structured into a hierarchy. In addition, relative priorities for each criterion were identified. The process of decomposing CNP goal achievement provided opportunities to structure the concept of performance in school foodservice based on CNP goal achievement. It is one of the advantages of applying the AHP to be able to decompose a complex issue into specific criteria. Without decision support methodologies like the AHP, directors are likely to base decisions on only a subset of important criteria without understanding their relative weights and interactions. Utilizing the performance criteria model in the decision-making process can ensure consideration of all necessary criteria.

Relative weights identified in the model provide information for directors and administrators to prioritize important criteria in achieving the overall CNP goal. Prioritizing important criteria can help directors allocate limited resources effectively. According to the performance criteria model, directors need to allocate the most resources for raising the level of customer satisfaction. Foodservice staff needs to demonstrate good quality of service when serving students. Regular training can be provided to staff regarding good service, presentation of food on the serving line, and how to maintain food quality while serving. Dining room ambience needs to be up to date to satisfy students. In addition, directors can maintain good communication with parents and school administrators regarding changes and news about the meal program to maintain parents' and administrators' satisfaction with the meal program.

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FOOD-AWAY-FROM-HOME (FAFH) EXPENDITURE OF SENIOR HOUSEHOLDS IN THE U.S.: A HECKMAN'S TWO-STEP APPROACH

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ABSTRACT

This study examined the two-step decision-making process for the FAFH consumption of the senior households in the U.S., using Heckman's two-step approach. The first step analysis was a probit regression to estimate the probability of dining-out. The second step was to predict the amount of expenditures using a truncated regression with Inverse Mills Ratio for correcting sample selection bias. The data used for this study were from the 2001 Consumer Expenditure Survey. The parameter estimates of the first probit analysis suggested that most of socio-demographic variables including household size, marital status, race, and education significantly influenced the probability of dining-out, while different variables were found to be significant in the second step analysis (education, urban, region, and housing tenure). The two-step approach used in this study provided a further insight into the consumption behavior of FAFH among senior households. The results can be utilized by the marketers of the foodservice industry to effectively segment and target senior households.

Key Words: Food-Away-From-Home (FAFH), senior market, expenditure pattern, Heckman's two-step approach.

INTRODUCTION

The American population is aging. In the most recent U.S. population census (U.S. Census Bureau, 2004), the age group of 65 years and over accounted for 35 million (12.4 % of the population), which reflects an increase by 3.8 million (by 12.0%) as compared to the 1990 figure. It is worth noting that the increasing trend is expected to continue and even to accelerate as the baby boomers (those born between 1946 and 1964) pass the age of 65 starting from 2011. As a corollary to the increase in the senior population, the consumer goods and services industries recognize the great potential and significance of senior market (Bai, Jang, Cai, & O'Leary, 2001). Accordingly, previous studies have paid attentions to the expenditure patterns of the group by stressing the importance of life-stage as a predictor of spending patterns (Abdel-Ghany & Sharpe, 1997).

Food-Away-From-Home (FAFH) has been investigated by researchers for the past three decades reflecting the steady growth of FAFH expenditures coupled with change in the socio-demographics of the U.S. population. Despite the substantial market size and increasing purchasing power of seniors, research on seniors' FAFH has received a limited attention. Most of the existing literature on FAFH has focused on all households (Ham et al., 1998; Ham et al. 2003; Soberon-Ferrer & Dardis, 1991), FAFH during travel (Cai, 1998), FAFH comparison between two countries (Ham et al., 2004), FAFH by type of meal (Hiemstra & Kim, 1995; Jensen & Yen, 1996), and FAFH by type of eating facility or place (Hiemstra & Kim, 1995; McCracken & Brandt, 1987). Furthermore, previous studies did not consider the two-stage nature of the FAFH decision: decision as to whether or not to eat away from home and about how much to spend, as discussed in more details later. This study was aimed at filling the research gap by investigating the senior household's FAFH with the two-step decision considered. Thus, the objective of this research was to examine the association of socioeconomic and demographic variables both with the decision to consume FAFH and with the decision of how much to spend on FAFH.

RELATED LITERATURE

The review of literature on FAFH indicated that the FAFH studies were initiated in the middle of 1970s by researchers in the economics while hospitality management scholars started to join the study in mid 1990s (e.g., Hiemstra & Kim, 1995; Cai, 1998; Ham et al., 1998; Ham et al., 2003). The FAFH researchers examined different data sets using various statistical techniques in an attempt to understand FAFH consumption patterns among the U.S. population in relation to the shift of demographic information and life style. Household production theory has been a foundation to the FAFH studies in a broad context (e.g., Cai, 1998; Ham et al., 1998; Ham et al., 2003; Hiemstra & Kim, 1995; McCracken &

Brandt, 1987; Soberon-Ferrer & Dardis, 1991). The theory views a household as a production and consumption unit, and suggests that the value of time is an important factor affecting FAFH consumption for a household to maximize its utility. The demand of market goods and services can be derived as a function of a number of household variables such as household income, value of time as a measure of the household's opportunity cost, and other household characteristics (Lancaster, 1966; 1971).

In response to the dramatic change of the structure of the U.S. population in 1970s, Sexauer (1979) investigated socio-demographic household characteristics by comparing the two periods of data: 1960-61 and 1972-73, and concluded that shifts of demographics and income distribution made a significant impact on the demand for FAFH expenditure. Numerous studies identified that household variables (household size, marital status, age, race, education, urbanity, and region) significantly influenced FAFH consumption decision or amount of the expenditures (Abdel-Ghany & Sharpe, 1997; Cai, 1998; Ham et al., 1998, 2003, 2004; Hiemstra & Kim, 1995; Jensen & Yen, 1996; McCracken & Brandt, 1987; Soberon-Ferrer & Dardis, 1991). While most of the FAFH studies examined FAFH expenditures of the U.S. population by investigating demographic and socioeconomic variables, the literature review revealed other unique publications. Lanfranco, Ames, and Huang (2002) examined the budget allocation pattern to food of Hispanic population and reported that Hispanic families allocated more percentage of budget to total food and FAFH than non-Hispanic families in the U.S. Ham et al. (2004) compared Korean and US population to see the differences of the FAFH expenditure patterns between the two cultures and determined significant variables only in Korean sample: number of children, family size, and housing tenure. Hiemstra and Kim (1995) contributed to the FAFH spending research by adding type of eating-place and meal occasion as significant factors.

METHODOLOGY

Data and Analysis

Data were obtained from the fourth quarter interview component of the 2001 Consumer Expenditure Survey (CES), compiled by the U.S. Bureau of Labor Statistics (BLS). The CES program provides a continuous and comprehensive flow of data on the consumer expenditure patterns of U.S. households. Respondents were asked to report their expenditures for foods including foods-at-home and foods-away-from-home during the three months prior to the interview month. For example, information on FAFH during the fourth quarter of 2001 includes expenditures from July 2001 through November 2001. Household characteristics were also drawn from the data set. The sample for this study consists of 1,551 senior households, headed by those who were 65 years or older. Among 1,551 senior households, 1,063 respondents reported expenditures associated with FAFH, indicating that 68.5% dined out during the survey period, while 31.5% did not. This FAFH figure for senior households was higher than that of all households (62.0%) (Ham et al., 2003; Ham et al., 2004), which indicates that senior households are more likely to dine out than average households in the U.S.

The analysis of the FAFH expenditure raises an important issue. A large proportion of the surveyed households (31.5%) reported zero consumption of FAFH as noted above. For the dependent variable with censored data, ordinary least squares (OLS) regression is not appropriate because it leads to biased and inconsistent estimates of the coefficients (Kennedy, 1998). A limited dependent variable procedure is recommended in this situation. The Tobit analysis is often used for models with limited dependent variables. However, Tobit assumes that the likelihood of FAFH decision and the level of FAFH expenditure are determined at one step, which ignores the two-step nature of the decision process of FAFH (Byrne, Capps, & Saha, 1996). It is usually understood that the FAFH consumption decision follows a two-step process: 1) the decision is made as to whether or not to consume FAFH, called as the participation decision, and 2) the decision is made regarding the level of FAFH consumption, usually measured with the FAFH expenditure and known as the expenditure-level decision. Based on the two-stage decisions, the Tobit model is too restrictive because it assumes that any explanatory variable that increases the likelihood of FAFH consumption in the participation stage will also increase the conditional mean of the variable in the expenditure-level decision. In addressing the limitations of Tobit model, this study employed a two-step approach proposed by Heckman (1979). This approach has two stages of estimation to address two-step characteristics of the FAFH decision. The first stage estimates a model of the probability of the FAFH consumption decision using a probit regression as follows:

$$y_i^* = X_i\beta_i + \varepsilon_i, \quad \varepsilon_i \sim N(0, \sigma^2) \quad (1)$$

$$y_i = \begin{cases} 1 & \text{if } y_i^* > 0 \\ 0 & \text{if } y_i^* \leq 0 \end{cases}$$

where y_i^* is latent variable, y_i is observed variable, X_i is the vector of independent variables, and β_i is the vector of coefficients associated with the corresponding independent variables. Byrne et al. (1996, pp. 617) claimed, "a straightforward OLS estimation, using the truncated sample, for the second stage model results in sample selection bias, defined as an omitted variable problem and Heckman (1979) provides a specification for the omitted variable to correct

sample selection bias, if present.” The omitted variable is called as the Inverse Mill’s Ratio (IMR), or Lamda (λ). From the probit estimation, the IMR is obtained by calculating the ratio of the value of the standard normal density function to the value of the standard normal cumulative distribution function:

$$\lambda = \phi(X_i\beta_i) / \Phi(X_i\beta_i) \quad (2)$$

where ϕ is the standard normal density function and Φ is the standard normal cumulative distribution function. The second stage model takes the form based on the equation (1) as follows:

$$y_i = y_i^* \quad \text{if } y_i^* > 0$$

$$y_i = 0 \quad \text{if } y_i^* \leq 0$$

The IMR is added as an instrument to the equation (1) in the second stage model and a significant result of the IMR indicates that the sample selection bias is present but is corrected. Therefore, a Heckman’s two-step model was employed in this study to correct potentially biased and inconsistent coefficient estimation due to sample selection bias (Greene, 2002). The LIMDEP 8.0 was utilized to estimate the coefficients of the two-step model in this study.

Variables and Hypotheses

The dependent variable for the first-stage model (probit) was whether or not a senior household consumed FAFH: coded 1 if consumed, and 0 otherwise. The dependent variable of the second-stage model was the FAFH expenditure that was measured by the household quarterly expenditure in dollars on FAFH. Based on previous research on FAFH, four groups of independent variables were employed in this study: socio-demographics (household size, marital status, race, education, retirement, urbanity, and region), economic status (income and housing tenure), health status (age, age squared, and medical expenditure), and food at home. Drawing upon the literature, the hypothesized signs of the independent variables were identified, but the detailed explanation about each variable and hypothesis could not be included in this paper due to space limitation.

RESULTS AND DISCUSSION

The First-Stage Probit Regression Model

The results of the first-stage probit regression model are presented in Table 1. As indicated by the figures at the bottom of the table, the log likelihood statistics and its corresponding chi-square statistic indicate that the probit model is significant. The Hosmer-Lemeshow statistics also confirmed a good-fit of the model. Table 1 presents variables significant in explaining the likelihood of dinning-out among the senior households.

As hypothesized, household size emerged positively significant, which signifies the larger senior households have higher probability of FAFH consumption. Marital status of the senior household was also positively and significantly related to the likelihood of consuming FAFH. Married senior couples, being together, are more likely to dine-out than seniors without spouse. White households showed greater probability of consuming FAFH than the other race group. However, as opposed to our hypothesis, seniors who had graduate education were found to be less likely to dine out when compared to those with less than a high school education. Other education groups did not show significant differences. It may be due to high health-consciousness of the graduate education group so they may avoid dining out with the difficult to control food quality and quantity. Retirement status appeared to be not significant, which is different from expectation that retired seniors has more time to cook at home so less likely to dine out. Considering the negative sign of the coefficient, the expectation about the retirement status seemed to be in the right direction, but the degree was not up to the influential level. Unlike the hypothesis, the urbanity variable was found to be not significant, which indicates that seemingly more opportunities for FAFH in the urban setting did not play important role in increasing seniors’ probability of dining out. Seniors in the Western region were found to be significantly negative, meaning significantly less probability of making the FAFH decision than those in the Northeastern. It is difficult to presume the exact reason, but it might be because easier access to restaurants is possible in Northeast, but seniors often need to drive longer in the West. In the Northeastern states, public transportation is more available and restaurants are located in relatively close distances than the Western states. Income, part of economic variables, was found to be positively significant as hypothesized. That is, higher income-earning seniors are more likely to dine-out than those with lower incomes. Housing tenure, another economic information, probably meaning households’ major assets or resources, was statistically significant as hypothesized. It indicates that senior households with housing ownership tend to dine-out as compared to those living in rental housing. Among health variables, medical expenditure was positively significant contributing to explaining the probability of FAFH consumption, while age and age squared were not significant. The finding supports that those seniors who are not in good health status tend to increase the likelihood of FAFH consumption. But high medical expenditures may mean that they use high quality health care so it can capture resource level.

Results of the Second-Stage Truncated Regression Analysis.

The results of the second-stage truncated regression model are presented in Table 2. The F statistic indicates that the model is significant. The significant inverse Mill's ratio (Lamda) suggests that sample selection bias would have resulted if the expenditure equation had been estimated without considering the decision to consume FAFH. That is, the latent instrument variable (Lamda) is an important element in determining the level of FAFH expenditure. It is interesting to note that, different from the results of the first-stage probit analysis, only a few independent variables were found to be significant in the model for the FAFH expenditure decision.

Table 1
Results of the First-Stage Probit Regression Analysis

Variables	Coefficient (β)	Standard Error (S.E.)	β /S.E.
[Socio-demographic]			
Household size	.195	.087	2.24**
Marital Status			
Married	.328	.086	3.81***
(Other)			
Race			
White	.386	.103	3.74***
(Other)			
Education			
Graduate	-.265	.115	-2.30**
College or Some College	-.0025	.113	-.022
High school	.0016	.114	.014
(Some High school or less)			
Retired			
Yes	-.104E-3	.992E-4	-1.06
(No)			
Urban	.081	.110	.74
(Rural)			
Region			
West	-.214	.0998	-2.142**
South	-.087	.097	-.896
Midwest	-.103	.098	-1.041
(Northeast)			
[Economic Status]			
Income	.559E-5	.152E-5	3.667***
Housing Tenure			
Yes	.195	.087	2.235**
(No)			
[Health Status]			
Age	-.115	.140	-.816
Age squared	.637E-3	.923E-3	.690
Medical Expenditure	.163E-3	.457E-4	3.569***
Constant	4.627	5.312	.871
Log Likelihood	-.872		
Restricted Log Likelihood	-.966		
Chi-square	186.9***		
Hosmer-Lemeshow			
Chi-square	10.7		
p-value	.218		

Note: 1. *p < .1, **p < .05, ***p < 0.01, 2. Variables in parenthesis are reference categories.

Unlike the hypothesis and the probit results, household size was not significant in explaining the FAFH expenditure for the senior household. The result is contradictory to the previous studies of all households. It may be

presumed that average seniors are more controlling their overall FAFH budget with their reduced discretionary income than the younger households. Similarly, marital status, different from the probability of the FAFH consumption, was found to be not significant to the expenditure level. From the finding of this research, it is difficult to claim that higher levels of education were significantly associated with greater FAFH expenditure. But one interesting finding in education was that even though graduate-educated seniors had lower probability of dining out, they tended to spend significantly more on FAFH at 0.1 level of alpha, when they dine-out. Like the probit result, retirement variable was found to be not significant in the expenditure model as well. Unlike the result from the probit model, urbanity was found positively significant in the second-stage analysis. Midwest was found to be negatively significant at alpha level of 0.1 in comparison with Northeast. It means that senior households in Midwest tended to spend less on FAFH. However, since the likelihood of the FAFH decision by the Midwestern seniors in the probit model was not significantly different from that by Northeast, it may point out that the price levels of average Midwestern restaurants might be lower than those of Northeastern. Different from the findings of the probit model, income was not significant in explaining the level of the FAFH expenditure. But as one of the economic variables, housing tenure was found significant. This suggests that since many of seniors were retired and received reduced income, housing ownership, as most significant assets, has more important role in how much they consume FAFH rather than income does, even though both income and housing tenure were significant in the FAFH participation decision.

Table 2
Results of the Second-Stage Truncated Regression Analysis

Variables	Coefficient (b)	Standard Error (S.E.)	b/S.E.
[Socio-demographic]			
Household size	-.086	.073	-1.174
Marital Status	-.005	.141	-.037
Married (Other)			
Race	-.147	.196	-.750
White (Other)			
Education			
Graduate	.276	.166	1.667*
College or Some College	.110	.142	.776
High school (Some High school or less)	.031	.146	.212
Retired			
Yes (No)	-.008	.189	-.046
Urban (Rural)	.326	.154	2.116**
Region			
West	-.023	.119	-.195
South	.008	.112	.073
Midwest (Northeast)	-.201	.116	-1.728*
[Economic]			
Income	.265E-5	.295E-5	.897
Housing Tenure			
Yes (No)	.337	.137	2.454**
[Health]			
Age	.245	.183	1.339
Age squared	-.0016	.0012	-1.341
Medical Expenditure	.248E-4	.832E-4	.298
[Food at Home]			
Food at Home	.788E-3	.843E-4	9.346***
Constant			
Lamda (λ)	-4.93	6.87	-.718
	-1.100	.534	-2.062**
F value	10.34		
p-value	.000		

Note: 1. *p < .1, **p < .05, ***p < 0.01, 2. Variables in parenthesis are reference categories.

Different from the hypotheses, all the health-related variables including age, age squared, and medical expenditure were not significant in explaining the level of FAFH expenditure. It was also different from the finding of the probit model that one of the health variables, medical expenditure, went significant. It seems to indicate that health status may be related to the probability of dining out, but as far as seniors are healthy enough to dine out, their health status is not influential in differentiating the level of FAFH expenditure.

CONCLUSION

The senior market is rapidly growing with more expendable income and thus stronger purchasing power than ever before. According to the growth in senior population, literature demonstrated an attention to the study on the expenditure patterns of the group. Judging from the contemporary trend of consumer markets, it was imminently needed to practice research on the senior market in the restaurant industry to be ensured about the characteristics of the senior group in order to effectively target the specific market. In an attempt to understand seniors' FAFH expenditure patterns appropriately, this study employed the two-step model that can cover both participation and expenditure decisions of senior households' FAFH. The parameter estimates of the first probit analysis suggested that household size, marital status, race, education, region, income, housing tenure, and medical expenditure significantly influenced the probability of eating-out. The second step analysis found that somewhat different variables (education, urban, region, and housing tenure) were significant as compared to the first probit analysis. Thus, it could be understood that socio-demographics were more useful in understanding the participation decision of the senior households. This two-step approach provided more information than the Tobit model regarding the unique role of each variable in the eating-out decision and the consumption level. This additional information will be valuable for understanding senior consumers in the restaurant industry.

This study posited the importance of the senior market in the restaurant industry, revealing that the senior group expensed about a quarter of the total food spending on dining out. The research suggests that the restaurant industry be attentive to the senior market, as they are more influencing the restaurant industry than before with increasing affluence, higher education, and healthy and vibrant life style. In this sense, the present study can contribute to segmenting senior markets and identifying target markets, while the findings would also be utilized to create marketing strategies to promote the restaurant industry as well as to develop operational tactics to better serve the market. To more effectively catch up with changes in the senior market, however, periodic surveys and analyses of the market may be useful for spotting the trend of expenditure patterns. Food At Home (FAH), hypothesized as a substitute for FAFH, was found to be significant, but the sign of the coefficient emerged positive as opposed to the hypothesis. Those senior households that spent more on FAH were detected to spend more on FAFH as well. It may demonstrate that the FAH variable represents food quality, not a substitute good for FAFH. Thus, those seniors paying attention to food quality at home will be significantly more interested in consuming quality FAFH as well.

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MULTIDIMENSIONAL CUSTOMER-BASED BRAND EQUITY AND ITS CONSEQUENCES IN THE HOTEL INDUSTRY

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ABSTRACT

Brand loyalty obtained the lowest score among the four components of multi-dimensional brand equity in the hotel industry. However, brand loyalty, perceived quality, and brand awareness/association all positively affected perceived value. While brand loyalty and brand awareness/association influenced revisit intent, perceived quality did not influence revisit intent. A comparison of the mean values of each hotel's brand equity dimensions shows that brand loyalty and perceived quality are significantly different among hotels, whereas brand awareness and brand association are not different among hotels.

Key Words: brand equity, brand loyalty, perceived quality, brand awareness/association, revisit intent and perceived value

INTRODUCTION

In the past decades, researchers have produced a large number of studies on brand equity. Faquhar (1989) stated that brand equity is the value added to the product by brand. This value includes a consumer's willingness to pay premium prices, future profits and long-term cash flow, and marketing success. In the hotel industry, many hotel companies are looking to acquire existing brands rather than to develop brands because, as Cobb-Walgren stated (1996), the probability of failure for a new brand launching in the market is as enormous as the cost of bringing a new brand to market. For this reason, brand equity research in marketing has been largely concentrated on customer-based brand equity, emphasizing on the importance of marketing advantages. Researchers have underlined that customer-based brand equity can yield a number of marketing value. Farquhar (1989) stated that the brand has value only if it has meaning to consumers. Keller (1993) mentioned the importance of understanding brand equity from the customer's perspectives: "though the eventual goal of any marketing program is to increase sales, it is first necessary to respond favorably to marketing activities for the brand" (p.8). Cobb-Walgren (1995) maintained that the choice of behavior is affected by consumer based brand equity created in the mind of the consumer. Keller (2001) and Hoeffler (2003) mentioned that by building strong brand in marketing, greater customer loyalty, higher resiliency to endure crisis and increased marketing communication effectiveness can be created.

In the hotel industry, which is a service business, brand equity is an important asset. Some researchers have interpreted service "brand" as a promise to the customer (e.g. Chernatony & Segal-Horn, 2001; Berry, 2000; Mistry, 1998; Ambler & Styles, 1996). Berry (2000) wrote that brand "plays a special role in service companies because strong brands increase customers' trust of the invisible purchase" (p. 128). Since the service business is labor-intensive and based on human performance related to those it serves, the customer's experience with the company plays a critical role in building the brand.

Although the emphasis on the importance of consumers in service marketing has increased in past years, measuring the brand equity underlying consumers' cognitive aspects is quite new concept in service brand marketing compared to products brand marketing. Only recently, have several researchers embarked on adopting the measuring consumer-based brand equity in their service brand studies (Cobb-Walgren, Rubble, & Donthu, 1995; Berry, 2000; Mackay, 2001; Kim, Kim, & An, 2003). In this aspect, the current study can provide another insight into the value that hotel brands hold. There are three purposes to this study: 1) to measure brand equity in mid-priced hotels in the US; 2) to investigate the relationship between brand equity and customer perceived value, and between brand equity and revisit intent and 3) to compare each hotel brands' four components of brand equity.

Measurement of brand equity

Capon et al. (1994) argued that measurement of brand equity can be divide two perspectives, financial perspectives and customer perspectives. Keller (1993) stated that a financial based approach to brand equity offered more unbiased insight into value of the brand for accounting purposes, or for merger, acquisition. Based on the financial market

value of the firm, Simon and Sullivan (1993) developed a technique estimating a firm's brand equity. Keller (1993) further stated that while a financial approach provides a more precise insight into valuation brand, it could be disadvantageous for managers to establish brand strategy unless they are good at handling financial data. For this reason, the customer-based brand equity is more practical for managers in that it provides for them a strategic vision of customer behavior that can be adapted to brand strategy. Customer-based approach assesses customer mindset such as the awareness, associations, attachments and loyalties. These measures have been studied by many researchers (Aaker; 1991, 1996; Keller, 1993; Blakston, 1995; Agawal& Rao, 1996; Yoo & Donthu, 2001; Vazques et al, 2002).

The multi-dimensional customer-based brand equity constructs

Aaker (1991) mentioned that brand equity consists of brand loyalty, brand awareness, perceived quality, brand association and other proprietary brand assets such as patents, trademarks, and channel relationship. However, since the fifth components are not relevant to the consumer perception, only the first four components of brand equity were adopted for this study. Furthermore, how does this each measured brand dimension relate perceived value, and how affect brand equity revisit intent will be examined.

Yoo and Donthu(2001) have developed multidimensional brand equity scale. In their study, they found that brand awareness and brand association are not divided into two dimensions in exploratory and confirmatory factor analysis, so they suggested that a three-factor brand equity, which combines brand awareness and brand association into one dimension produced a better result for their study. Washburn and Plank (2002) examined Yoo and Donthu(2001)'s scale and supported the proposition that a three-factor structure of brand equity provides the strongest and cleanest fit. In this study, Yoo and Donthu (2001)'s scale were adopted for brand awareness and brand association, and then this study examined the impact of brand equity on perceived value and revisit intent to observe the consequences of brand equity. The following hypotheses were tested.

Hypothesis1: The four dimensions of brand equity in the hotel industry will positively affect the perceived value

H1a: Brand loyalty will have a positive effect on customers' perceived value

H1b: Perceived quality will have a positive effect on a customers' perceived value

H1c: Brand awareness/association will have a positive effect on a customers' perceived value

Hypothesis2: The four dimensions of brand equity in the hotel industry will positively affect revisit intention

H2a: Brand loyalty will have a positive effect on a customers' revisit intention

H2b: Perceived quality will have a positive effect on customers' revisit intention

H2c: Brand awareness/association will have a positive effect on customers' revisit intention

Hypothesis3: Perceived value will have a positive effect on revisit intent.

The study

An important criterion in selecting brand is the segmented market in which several different brands compete with one another. The midscale with F&B segment was selected for this study. According to Hotel investment Handbook (2002), there are 16 hotel brands in the midscale hotel with F&B segment, which have 4,725 properties throughout the USA. The top six brands of this segment, Holiday Inn, Best Western, Ramada, Quality Inn, Howard Johnson and Four Points, were selected.

This study employed a convenient sample using the self-administered questionnaire. The survey was conducted from May 10 to May 25 in 2004 at the Oklahoma City Airport in Oklahoma, USA. Potential respondents were approached by a researcher and asked first if they had visited one of the six mid-priced hotels in the USA. Then the questionnaires were distributed to only those who had visited one of the hotels. The questionnaire consisted of three sections. The first section listed the brands names which are circled by respondents and the second section provided specific statements for each dimension. The items for measuring brand loyalty, perceived quality, brand awareness and brand association followed by perceived value and revisit intent constituted the second section. The demographic information is the final section of the questionnaire. The questionnaire had 31 total items. Brand loyalty, perceived quality, brand awareness, and brand association were measured on a seven-point Likert scale, with 1 for "strongly disagree" and 7 for "strongly agree." Perceived value items were measured on a semantic scale with the price shown for the hotel ranging from 1 for "very unacceptable" to 7 for "very acceptable." Except for perceived quality, all items were modified to a hotel context from the original format of other studies. Parasuraman et al. (1988) developed the SERVQUAL model for measuring service quality in which all items were divided into five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. This study, however, adopted Gabbie and O'Neil's (1996) tool for measuring hotel service quality. In Gabbie and O'Neil's

study, only the first four dimensions were assessed because, according to Perran's study (1995), the empathy dimension of SERVQUAL was less important and even irrelevant in hotel service quality.

Structural equation modeling (SEM) was used and the LISREL 8.51 maximum likelihood method (Jöreskog & Sörbom, 1993) was employed. The analysis was examined in four stages. First, the construct reliability of the items was assessed using the Cronbach alpha coefficient. An exploratory and confirmatory factor analysis was conducted to examine whether the individual items were loaded on their appropriate factors as intended. Second, the overall fit of the model to the data was tested. Third, the measurement and structural parameters were examined to determine if the data supported the proposed hypotheses. Lastly, ANOVA was employed to compare mean differences of the sampled hotels.

ANALYSIS

The sample consisted of 146 male respondents (52.5%) and 131 female respondents (47.1%). Regarding age, 42.5% of respondents were above 46 years, 25.5% were 18 to 25 years, 18.2% were 36 to 45 years, and 13.8% were 26 to 35 years. The sample included 76.2% Caucasian, which constituted the greatest percentage of respondents, followed by African American (8.3%), Hispanics (6.5%), Asian (6.1%), and Native American (2.5%). Concerning the annual income level, 39.6% of respondents made above \$70,000, followed by 24.0% between \$30,001 and \$50,000, 17.6% between \$50,001 and \$70,000, 12.8% between \$10,001 and \$30,000, and 6.0% below \$10,000. The education level was quite evenly distributed compared to other characteristics of the sample: 28.8% of respondents had some technical school or college education, 22.5% had a bachelor's degree, 21.8% had a graduate degree, 18.7% had a high school or GED degree, 7.6% had an associate degree, and 1.1% had none.

Three methods (Cronbach's reliability, exploratory factor analysis and confirmatory factor analysis) were used to select and assess the final items. Cronbach's measure reliability coefficient was first calculated for the items of each construct. When it reached .70, the cutoff level of reliability recommended for theory testing research (Nunnally and Bernstein 1994), the items that did not significantly contribute to the reliability were eliminated for parsimony purpose. As a result, 21 items were retained for the six constructs: one of the brand loyalty items and one of the brand association items were removed. Thus, the questionnaire included 2 items for brand loyalty, 12 for perceived quality, 3 for brand awareness, 2 for brand association, and 2 for revisit intention. For perceived quality items, the partial disaggregation approach was used, in which each item is treated as an individual indicator of the relevant factor. The partial disaggregation approach allows the researcher to combine items into composites to reduce random error, yet retain the multiple measure approach to structural equation modeling (Sweeny et al., 1999). Therefore, the four indicators that represented the four dimensions of perceived quality were extracted. Cronbach alpha of these four indicators were all acceptable levels. However, in exploratory factor analysis, four distinct factors in the brand equity construct were not produced, because brand awareness and brand associations were inseparable. Therefore, only five factors (i.e., brand loyalty, perceived quality, brand awareness/association, revisit intent and perceived value) were discovered in this sample.

Confirmatory factor analysis was used to assess the items of the constructs more rigorously, based on the correlation matrix of the items by using LISREL 8.51 maximum likelihood method. A measurement model was set to have six factors (latent variables). The *t* values for the loadings ranged from 10.70 to 19.15, demonstrating adequate convergent validity (*t*-value>2). The confirmatory factor analysis indicated a good fit ($\chi^2=209.67$, *df*=89, RMSEA=0.07, GFI=0.90, NFI=0.93, CFI=0.96). In addition, the scale construct composite reliability was quite satisfactory. To assess internal consistency of each latent variable, composite construct reliability was measured. Since all constructs were greater than 0.70 which was an acceptable level of composite reliability (Formell and Larker, 1981), each construct had internal consistency. In order to examine discriminant validity, average variance extracted (AVE) per construct was calculated. It ranged from 0.61 to 0.77, exceeding the acceptable level of 0.50. However, the correlation between association and awareness was very high (0.88). The squared correlation (0.77) was greater than the average variance extracted and was equal for association and awareness (0.61, and 0.77). In summary, the selected items have reliability for the six research construct, but discriminant validity between brand awareness and association was not proven in this sample.

Structure equation modeling (SEM) was used to estimate the parameters of the structural model. The structural model specified the three dimensions of brand equity as the exogenous constructs (brand loyalty $>_1$, perceived quality $>_2$, and brand awareness/association $>_3$). The exogenous constructs were related to the endogenous mediating variable 0_1 customer perceived value, which were related to revisit intention 0_2 , finally 0_1 also was related to 0_2 . Goodness-of-fit, indicating the overall acceptability of the structural model analyzed was acceptable ($\chi^2=229.73$ with 94 degree of freedom, RMSEA=.087, GFI=.89, NFI=.93, CFI=.95 and IFI=.95). The squared multiple correlations (*R*²) for the perceived value construct was 0.51, indicating that nearly a half of the variance in the perceived value construct is explained by its four dimensions of brand equity. The revisit intent was 0.74 (see Table 1)

The p ($<.05$) values of the estimates for hypothesis testing were determined in one-tailed t test. Because of the directional hypotheses, the rule of 1.65 t value was critical value at the .05 significance level. Brand loyalty and perceived quality and brand awareness/brand association were the dominant antecedents of value perception (H1a: (β_{11} =0.19, H1b: (β_{12} =0.47 and H1c: (β_{13} =0.21). Brand loyalty and brand awareness/association affect revisit intention (H2a: (β_{21} = 0.20, and H2c: (β_{23} =0.37). Perceived quality didn't have an effect on revisit intention (H2b; (β_{22} =0.06). However, perceived quality influenced revisit intent only by via perceived value. As hypothesized, perceived value was positively related to revisit intent (H3: (β_{31} =0.44). Table 1 and figure 1 show the final result of the hypothesis test.

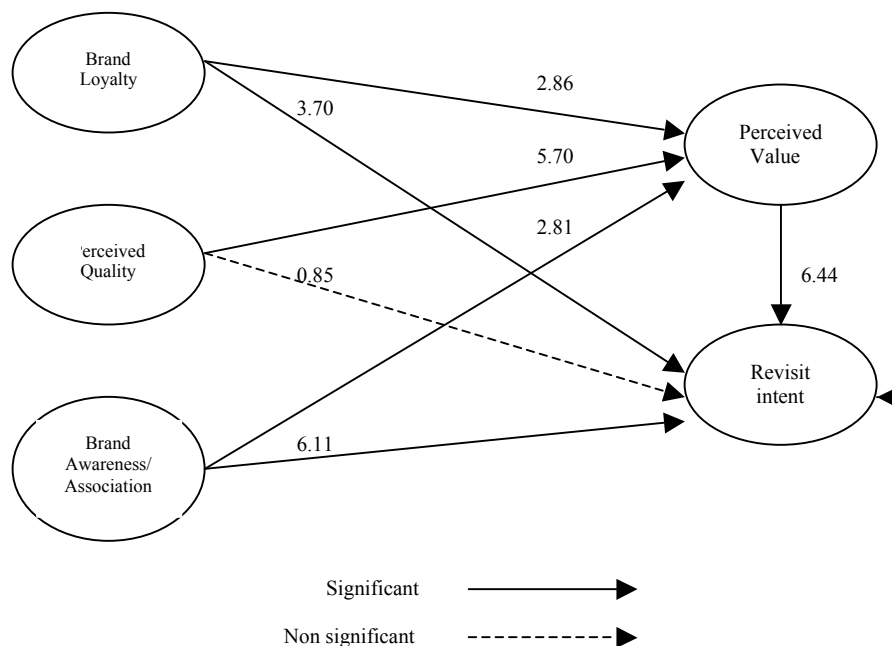
Table 1
Standardized Structural Path Estimates and Hypotheses test

Path	Coefficient (T-value)	Hypotheses	Indirect effect Revisit intent
Brand loyalty \rightarrow Perceived value (β_{11})	.19(2.86)	Supported	.08(2.70)
Perceived quality \rightarrow Perceived value (β_{12})	.47(5.70)	Supported	.21(4.24)
Brand awareness/association \rightarrow Perceived value (β_{13})	.21(2.81)	Supported	.09(2.65)
Brand loyalty \rightarrow Revisit intent (β_{21})	.20(3.70)	Supported	
Perceived quality \rightarrow Revisit intent (β_{22})	.06(0.85)	Not supported	
Brand association/association \rightarrow Revisit intent (β_{23})	.37(6.11)	Supported	
Perceived value \rightarrow Revisit intent (β_{31})	.44(6.44)	Supported	
—	229.73		
d.f	94		
p	.000		
R-			
Perceived value	.51		
Revisit Intent	.74		

Note: χ^2 =229.73 with 94 degree of freedom, Root Mean Square Error of Approximation (RMSEA=.087)

Goodness-of-Fit Index (GFI) =.89, Normal Fit Index (NFI) =.93, Comparative Fit Index (CFI) =.95, Incremental Fit Index (IFI) =.95

Figure 1
Structural Model of Brand Equity Framework



Mean Difference of Brand Equity in the Measured Hotels

For comparing each dimension of brand equity, a one-way ANOVA was employed. Through all dimensions of brand equity, Four Points obtained the highest rates among other sample hotels. The sum of the four dimensions of brand equity in each hotel also shows that Four Points is the highest total brand equity ($\mu = 20.91$). Brand loyalty and perceived quality are significant among other hotels whereas brand awareness and brand association is not significant different. The table below shows the summary of the result.

Table 2
Mean Differences of Dimensions of Brand Equity

	Brand Loyalty ₁	Perceived Quality	Brand Awareness	Brand Association	Total
Holiday Inn	3.70 ¹	4.83	5.40	4.97	18.90
Best Western	3.42	4.91	5.27	5.08	18.68
Ramada	3.30	4.90	5.20	5.11	18.51
Quality Inn	3.03	4.83	5.17	4.83	17.86
Howard Johnson	3.19	5.08	5.00	4.75	18.02
Four Points	4.30	5.96	5.50	5.15	20.91
F-value	4.221*	2.581*	0.918	0.608	

¹ Note: Mean value of responses from respondents * Significant at the 0.05 level.

DISCUSSION

The purpose of this study was to measure brand equity in the hotel industry. For all sampled hotels, brand loyalty obtained the lowest score among the four components (see Table 3). This result demonstrates how difficult it is for a hotel to gain or maintain loyal customers. Hotel companies are spending a lot of money on marketing and promotion to establish their brand and encourage customer loyalty to brand. Considering that the cost of gaining a new customer is five times more than the cost of retaining an existing customer, and that a 5% increase in customer loyalty can produce a profit increase from 25% to 85% (Barsky, 1994; Heskett et al., 1994), brand loyalty is the most important factor among other dimensions for hotel sustenance. Therefore, it is critical that managers adapt to customers' ever-changing expectations and needs so as to satisfy customers and generate loyalty, resulting in enhanced business.

How brand equity could affect customers' perceived value and revisit intention, which are related to profitability or market share, was examined. As hypothesized, all dimensions (brand loyalty, perceived quality, and brand awareness/association) positively affected perceived value. This result indicates that all the dimensions of brand equity play a critical role in evaluating a hotel's value. Perceived value is defined as "consumer's overall assessment of the utility of a product based on the perceptions of what is received and what is given" (Sweeny et al., 1999). As defined, perceived value is related to the money customers spend. Brand loyalty and perceived quality are the dimensions occurring when customers have stayed at the hotel. The finding that these two dimensions influence perceived value is substantial. But, the finding that brand association/awareness has impact on perceived value is particularly worth attention. While some empirical work (Baldauf, 2003) has already demonstrated there is a correlation between brand awareness/association and perceived value, the result that brand awareness and brand association affect perceived value in a positive way in this study is intriguing: the higher the recognition of the brand, the higher the perceived value of the brand. It is easy for managers to ignore the fact that these two dimensions, measured by a customer's memory of a logo or a symbol of brands, can cause the perception of value. A symbol, logo, or physical appearance of the brand can occur in a customer's mind without the direct experience of that brand, thanks to environmental effects such as advertising. Conversely, even if customers stayed at a hotel regularly, it might be that they could not remember the superficial brand image. How the recognition or recall of a logo or symbol affects perceived value, related to give-and-take, should be investigated further.

While brand loyalty, brand awareness, and brand association influence revisit intent, perceived quality does not. This finding regarding perceived quality is an unexpected result because customers experiencing quality products and services in a hotel are more likely to show their intent to return to the same hotel. However, perceived quality has an indirect effect on revisit intention via perceived value. Even if perceived quality does not lead directly to revisit intent, through perceived value, which is a mediator of the two, perceived quality has an impact on revisit intention. Therefore, a

hotel that consistently offers quality services with reasonable prices will be able to retain high customer value, which in turn results in favorable revisit intent.

As expected, perceived value significantly affects revisit intent. This result shows that customers are sensitive to the money they spend. If they feel that a hotel has a good value for the price, including the room rate and other fees for using facilities at the hotel, customers will gladly stay at the hotel again.

Finally, the comparison of the mean value of each hotel's brand equity dimensions shows that brand loyalty and perceived quality are significantly different, whereas brand awareness and brand association are not different among the sampled hotels. This result proves that in the hotel industry, where human factors are highly interactive, experiential knowledge of customers is more important than superficial images for differentiating. It is also noteworthy to recognize that even if brand loyalty attained the lowest score among the dimensions, perceptions of brand loyalty among the same level of hotels were significant. This may indicate that brand loyalty is the most important dimension of brand equity, but is difficult to manage. Therefore, managers need to set systematic strategies for brand loyalty in order to improve and maintain high brand equity so they can earn advantages over competing hotels. The finding also indicates that perceived quality is another important factor that can be an effective tool for powerful differentiation strategies for establishing a strong brand.

It is highly unlikely to be able to measure a customer's mindset regarding brand equity to determine a hotel's whole brand equity, including its financial aspect. However, as many researchers (Keller and Lehmann, 2003; Ambler, 2002; Cobbe-Walgren, 1995; Farquhar, 1989) have insisted, understanding the customer's mind should be the first criteria for evaluating brand equity because brand equity is the result of the customer's activity.

LIMITATION AND SUGGESTIONS FOR THE FUTURE STUDIES

Like most studies, this work has several limitations; four are identified. First, there is a basic disadvantage of a study that measures the four dimensions of brand equity. As Ailawadi et al. (2003) mentioned, measurements based on consumer surveys cannot provide a "single, simple objective of brand performance." They pointed out that the difficulty of evaluating brand health and assigning a financial value to the brand in balance sheets and financial transactions still exists in survey-based measurement of brand equity, even if the measures are grounded in theory. Kiley (1998) argued that the dollar-value connection to the bottom line is essential for validation of brand equity.

Second, this study employed a convenient sample, which might not be representative of the target population. One could argue that the overall sample is not the primary target for the sampled brands. Whether respondents have the necessary information is another limitation of this study. Even if the questionnaire was distributed to people who already had experience with the brands, their responses were based on memories of experiences, which could be vague. Especially in perceived quality items, it might be difficult for respondents to recall the service they received. To remove this limitation, it is strongly recommended that the questionnaires be distributed at hotels.

Third, the items of brand equity used in this study are a limitation. Brand equity can be seen as a unified construct consisting of four elements. In measuring each element using a survey instrument, the items should be consistent. In this study, the four elements are brand loyalty, brand awareness, and brand association adopted from Yoo and Donthu's (2001) scale and perceived quality from the SERVQUAL model. Yoo and Donthu's scale was originally developed on the basis of the product category. Even if converted into a hotel context, the items need to be developed further so that they are exactly suitable for the hotel industry. Thus, developing a unified construct for all components is urgent for measuring brand equity based on a customer survey.

Finally, this study targeted only customers who had stayed in the mid-priced hotel segment. In the future, hospitality researchers should examine other segment brand equities, including upscale and/or luxury, to determine if the finding from this study is applicable to other segments.

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FACTORS CONSIDERED BY HOTEL RECRUITERS WHEN HIRING RECENT HOSPITALITY GRADUATES
FOR MANAGEMENT TRAINEE POSITIONS

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ABSTRACT

A study was conducted to determine the differences between what hotel company management trainee recruiters and management trainees reported as key indicators in the selection process. T-tests for independent samples were used to compare the recruiters' perceived versus the candidates' perceived reporting. Significant differences were found in 14 of 36 factors. The two samples were hotel company recruiters specifically involved in the selection of graduating seniors or recent hospitality graduates for management training opportunities, and management trainees who had been selected within the last year.

INTRODUCTION

This study compared what recruiters identified as important factors in selecting "ideal" management trainees and what the chosen management trainees identified as the key factors in their being selected. Two samples provided information on the importance of particular indicators in the selection of a management trainee. The first sample was Hotel Company recruiters specifically involved in the recruitment of graduating seniors or recent hospitality graduates for management training opportunities. The second sample was hospitality program graduates who were management trainees from within the last year. Comparing the two samples permitted the examination of the relationship between what the recruiters indicated as ideal/important in the selection of management trainees and what the management trainees reported those important criteria represent/were in the selection process.

These findings should be immediately valuable for both graduates of hospitality programs and recruiters of hospitality programs; additionally, these findings should have long-term value for the hospitality industry in general. Recruitment of qualified entry-level managers remains a problem for the hospitality industry (Dermody & Woods, 1998; MacHattan et al., 1997; Powell & Wood, 1999). The findings from this study should help to bring the expectations of two sides closer together and thus make for a better match of employee and employer. The hospitality industry invests a tremendous amount of resources toward recruitment and then subsequent training (Sciarini & Gardner, 1994). Both recruiters of and management trainees for employment in the hospitality industry seek a mutually beneficial relationship (Sciarini & Gardner, 1994). Greater success with initial management trainee recruitment could lead to lower employee turnover and costs in the hotel industry.

Review of Hospitality Management Recruitment Literature

This review of the literature focuses on the challenges of recruitment in the hospitality industry, key studies identifying influential factors/concerns of both recruiters and hospitality management students in the recruiting for management trainees, and core capabilities desired for the hotel industry.

The literature suggests that there are many challenges facing the hospitality industry that will make it more difficult to recruit and retain qualified managers. One serious challenge is that it is difficult to recruit the best talent to the field because of key obstacles that include offering low pay and demanding low-skill, hard work and long, sporadic hours. In general, the hospitality industry suffers from poor image. There is also increasing competition from other industries (Dermody & Holloway, 1998; Powell & Wood, 1999). Dittman describes a further challenge that is amplified by the poor image challenge discussed previously (Dittman, 1997). He implies that finding qualified hospitality workers who demonstrate a combination of desire, personality, intelligence and technical proficiency makes the recruitment process even tougher. Finally, in *Is Recruitment the Millennium Time Bomb for the Industry Worldwide*, Powell and Woods discuss new challenges found in the 1990s when economic growth, greater affluence and increased leisure time made the hospitality industries one of the fastest growing industries in the global economy. They elaborate by explaining the demand for qualified managers far exceeds supply and the people presently available are only "adequately prepared" (Powell and Woods, p. 2). These challenges will make recruitment and selection both more difficult and more important.

Several important studies determined how recruiters choose students to interview or hire. Sciarini and Woods (1997) identify previous studies that have provided: a demographic profile of a typical recruiter and a list of attributes used by recruiters in hiring decisions; a list of student characteristics recruiters use in hiring decisions; characteristics used in selecting hospitality programs for recruiting; and how recruiters make prescreening decisions about which students to

interview. They then conducted research to determine what factors most influenced students' perceptions of industries and companies. A review of four key studies used to compile the list of indicators in this research project was conducted. The first three studies helped to identify key indicators used by recruiters while the fourth study identified factors that most influenced students' perceptions of industries and companies.

In *Prescreening of Hospitality School Graduates: a Study of Hospitality Recruiter Decision Strategies*, Sciarini and Gardner (1995) used "policy capturing method" to identify the decision-making strategies and factors used when pre-selecting hospitality program graduates as candidates. The focus of this research was specifically on the pre-selection phase in the candidate selection process. The authors determined that hospitality recruiters were most concerned with willingness to relocate, work experiences, and extracurricular involvement when prescreening interview candidates. Their survey resulted in a 53.1 percent response rate from hospitality recruiters of 31 different organizations at a university career expo.

Further information for this research project came from *Undergraduate Business Internships and Career Success: Are they related?* Gault et al. (2000) attempted to determine if there was any significant relationship between undergraduate internship and entry-level career success. In their research, they identified four career skill categories that recruiters and students perceived as important in the recruitment process. These areas included communication skills, academic skills, leadership skills, and job acquisition skills. Communication skills included oral and written communication. Academic skills included analytical skills, problem-solving skills and creative thinking skills. Leadership skills included teamwork and relationship building skills. Finally, job acquisition skills included resume writing, interviewing, and networking skills. While the study focused on the relationship of internships and entry-level career success, the skill areas identified were useful in the construction of the survey from this study.

Ineson and Kempa (1997) offered an interesting addition to the literature with the article *Selecting Students: Is There an Education-Industry Mismatch?* This article was a follow-up to a study on the criteria used by employers in selecting hospitality management trainees. Ineson and Kempa identified motivation, commitment to work in the industry, interpersonal skills, communication skills, self-presentation skills and previous work experience as the main criteria used by recruiters. In this article, they argued that there was a serious mismatch between selection criteria used for admittance to hospitality programs and the selection criteria used by employers in the management candidate recruitment process. They suggested that better results would be yielded if hospitality program recruiters and industry recruiters worked together to determine the indicators used to assess a candidate for admission to a hospitality program.

Sciarini and Woods (1997) studied the factors most influenced students' perceptions of industries and companies. This study used a 5-point Likert-type scale to assess twenty items that might influence a student's impressions of a potential employer. The authors concluded that personal contact with a hospitality company influenced students the most. Additionally, building a long-term relationship with the student ranked important also. Sciarini and Woods suggested that recruiters should establish relationships with the students long before the initial interview for potential employment and those they should use multiple strategies to produce better results at the time of the job interview.

The literature also provided information on the core competencies indigenous to the hotel industry. Roberts and Shea's (1996) study was designed to identify core capabilities indigenous in the hotel industry through an expert panel generating lists of skills and assets used by hotel competitors. They rated each skill on its relative importance in the success of the firm. The resulting survey was distributed to 407 hotel managers to rate these skills. The authors then used factor analysis to cull the skills to seven strategic dimensions where two asset factors and five skill factors became apparent. They divided the factors into marketing factors of sales, pricing and marketing planning along with operational factors of tangible and intangible assets, human resource management and facility management. Of particular importance for this study was the finding that human resource management was a core competency. Included in human resources were training, recruiting and retention.

Research on the recruiting process has been centered on identifying and rating key factors that influence the recruiting process. The studies that identified recruiters or students' perceptions of what criteria used in the selection process were very useful for this study. Sciarini and Gardner's (1995) study using "policy capturing method" adds to what we know about criteria recruiters use in the pre-selection process before an interview. Identifying the core competencies needed to compete successfully in the hotel industry was also an important addition to the literature. Several articles identified future opportunities to use the recruiter and student identified indicators to compare what recruiters report as the most important characteristics with what the candidates report as the most important characteristics. This research, still missing from the literature, was the impetus for the current research project.

Specific Research Questions

The purpose of this study was to compare what recruiters of hotel management trainees reported as important to what hospitality graduates reported as important. The recruiters polled for the survey included those from Hilton Hotels Corporation, Hyatt Hotels and Resorts, Marriott International, Starwood Hotels and Resorts, and later Wyndham Hotels and Resorts. The hospitality graduates polled were those offered a management training position with a chain hotel company.

The questions were:

Question 1: In the selection process, do recruiters use the indicators they perceive and rate as important?

Question 2: Would there be variances in what the recruiter reported as being important and what the candidate reported as being important?

Question 3: If there were variances on specific indicators, which indicators and which group, the recruiter or management trainee, rated them as more important?

Question 4: What is the demographic profile of the recruiters involved in the selection process for management trainees?

Question 5: What is the demographic profile of the management candidates?

METHODS

There were two populations targeted for this research project. The two populations were both employees of hotel companies that have an on-campus management-training or entry-level management recruitment program for hospitality management graduates. The first population was recruiters or employees from major hotel companies that had direct input in offering a hospitality graduate a job as a management trainee. The second population was recent hospitality graduates that accepted an offer as a management trainee within the last year.

Recruiters' Sample. The first sample polled for the survey was recruiters from the Hilton Hotels Corporation, Hyatt Hotels and Resorts, Marriott International, Starwood Hotels and Resorts and later Wyndham Resorts and Hotels. A sample from each of these five companies came from recruiters who solicit management trainee candidates at a hospitality management school in Southern California. Each of these initial recruiter contacts referred the sample composition to their respective corporate office college relations or human resources department. The corporate office college relations/ human resources office then determined who and how many recruiters/employees would be involved in the survey. The researcher did require that in order to be included in this sample, the recruiter had to have direct input in offering a hospitality graduate a position as a management trainee.

Hilton's sample included 12 western region human resource directors who assisted with on-campus college recruiting. Hyatt Hotels and Resorts included 36 full-time employees who assisted in particular regions with on-campus college recruiting. Marriott International recruiters offered nine full-time employees who act as national recruiters on college campuses as potential participants of the study. Starwood Hotels and Resorts prioritized ten full-time employees who assist in particular regions with on-campus college recruiting. Wyndham's sample included two full-time employees who recruit for either sales management positions or operations management positions. Thus, in all, the potential sample included 69 recruiters from five hotel companies.

Management trainees' Sample. The second sample of hospitality graduates polled were offered a management training position or were working as management trainees with Hilton Hotels Corporation, Hyatt Hotels and Resorts, Marriott International, and Starwood Hotels and Resorts. The companies' college relations departments identified all management trainees from the U.S. for the sample. There were 12 Hilton management trainees included in this sample. Hyatt Hotels and Resorts' corporate office identified a sample of 36 recent management candidates. Marriott International's sample included 25 recent management candidates from two of the four regions within the United States. Starwood Hotels and Resorts' corporate office identified a sample of 13 recent management trainees. The potential sample of 86 candidates included management trainees offered positions from these four hotel companies.

Key Variables. The survey design was the result of a review of the literature and personal interviews with three recruiters of management trainees. The two surveys, one for recruiters and one for trainees, were designed to measure the importance of the same 36 indicators. There were three common areas of both surveys: candidate indicators, candidate's management competencies, and hospitality program attributes. On both surveys, the respondent was to use a Likert scale (1 = not important to 4 = very important) to indicate the level of importance placed on each of the listed candidate indicators, candidate's management competencies, and hospitality program attributes. By comparing the mean responses for each item, variances could be identified. Each survey also included a section to collect demographic information to form a profile of each sample group.

Pre-testing Survey. Four recruiters and two faculty members evaluated the surveys prior to distribution in a pre-test. The four industry reviewers represented Hyatt and Marriott International and all four were qualified to participate in the selection of management trainees. One faculty member with an expertise in statistics was from the education field of a graduate school in California. The second faculty member with an expertise in organizational behavior and hospitality management was from a hospitality management school in Southern California.

Maximizing Response Rate. Several steps were taken to ensure maximum survey response. There were two ways that the recruiters' survey was distributed. The initial intent was to rely on college relations departments of each hotel company to provide names and addresses of eligible participants; however, in the pre-test college relations departments preferred not to handle it this way. The companies did not want to release the personal information about the recruiter for the sample. In addition, it was determined in the pre-test that the college relations department's preferred method of communication with recruiters was electronic mail. Marriott International's University Relations department received the initial surveys as an attachment to an electronic mail request to participate in the study. The respondent then faxed his or her completed survey back. Further feedback from Marriott International recruiters indicated that an on-line Internet survey was preferred. At this point, the original survey was then loaded to a survey Internet site, Surveymonkey.com. Hilton, Hyatt, Starwood and Wyndham college relations/human resources departments were sent the surveys as an internet link. These four hotel company corporate contacts received a weekly reminder with a link to the surveys over the course of three weeks in November 2003. In an effort to obtain a larger sample, the college relations departments were sent the survey link in March and June 2004 as well.

The entire management trainee sample completed the survey through the Internet site, Surveymonkey.com, link sent through electronic mail initiated by Hilton, Hyatt, Starwood, and Marriott college relations departments. Hyatt, Starwood and Marriott college relations departments (or later by researcher when a candidate was identified by corporate office) sent the survey as a link through electronic mail to management trainees. These four hotel company corporate contacts received a weekly reminder with a link to the surveys over the course of three weeks in November 2003. In an effort to obtain a larger sample, the college relations departments were sent the management trainee survey link in March and June 2004 as well.

RESULTS

The response rate of recruiters was 62.3 percent with 43 of 69 recruiters sampled from five hotel companies having completed the recruiters' survey. The response rate was 43 percent for 37 of 86 management trainees sampled from four hotel companies who completed the management trainee survey.

Table 1
Profiles of Recruiter Respondents

<u>Characteristic</u>	<u>N</u>	<u>Percentage</u>
Gender		
Male	41	36.6
Female	41	63.4
Age		
20 to 24	41	0
25 to 29	41	12.2
30 to 34	41	24.4
35 to 39	41	29.3
40 to 49	41	24.4
50 to 59	41	9.7
Company		
Hilton	41	14.6
Hyatt	41	51.2
Marriott	41	17.2
Starwood	41	14.6
Wyndham	41	2.4
Ritz-Carlton	41	0.0

Recruiters' characteristics are reported in Table 1, which shows over half of the recruiter respondents were female and the majority of them were between the ages 30 and 49 years of old. Hyatt recruiters represented about half of the study sample.

Management trainees characteristics, reported in Table 2, reports that over half of the trainee respondents were female with over 97 percent of trainees falling between the ages 20 and 29. Hyatt trainees represented half of the study sample.

Table 2
Profiles of Management Trainee Respondents

<u>Characteristic</u>	<u>N</u>	<u>Percentage</u>
Gender		
Male	35	40.0
Female	35	60.0
Age		
20 to 24	36	77.8
25 to 29	36	19.4
30 to 34	36	2.8
35 to 39	36	0.0
40 to 49	36	0.0
50 to 59	36	0.0
Company		
Hilton	36	8.3
Hyatt	36	50.0
Marriott	36	27.8
Starwood	36	2.8
Wyndham	36	0.0
Ritz-Carlton	36	5.6

The mean responses to candidate attributes and management competencies for both recruiters and management trainees are in Table 3, which shows the attributes in descending order of importance according to the recruiters' ratings. The candidate attributes and management competencies t scores are also listed in Table 3 with double or triple asterisks indicating significance levels of less than .05 or .001 respectively.

In the Table 3, independent samples t-test for recruiters and management training candidates, the following candidate indicators and hospitality program attributes were significant:

- Positive physical characteristics (significance level is <.001).
- Technical ability in particular department (significance level is .001).
- Positive references from work in your hotel organization (significance level is .001).
- Scores on behavioral tests (significance level is .011)
- Ability to articulate a positive career path in the hotel industry (significance level is <.001).
- Willingness to relocate (significance level is .037)
- Ability to demonstrate positive development of other team members or subordinates (significance level is <.001).
- Ability to demonstrate positive leadership skills in extracurricular activities (significance level is .001).
- Geographic location of candidate's hospitality program (significance level is .001)
- Home base of program within department/school/college (significance level is <.001).
- Ranking of candidate's hospitality program among hospitality programs (significance level is <.001).
- Ranking of college or university (significance level is <.001).
- Hospitality program coursework teaches business management skills (significance level is .018).
- Hospitality program coursework teaches leadership skills (significance level is .007).

Table 3

Means and Independent Sample T- Test for Recruiters and Management Candidates

Questionnaire items	N	Recruiter	N	Trainee	T- Value
Effective communication skills	42	3.9	36	3.86	.595
Ability to demonstrate customer-focused service	43	3.81	37	3.73	.834
Professional interview appearance	43	3.77	37	3.84	-.786
Interview grooming	43	3.77	37	3.78	-.173
Neat and Clean at interview	43	3.74	37	3.84	-1.028
Positive references from work in your hotel org	43	3.7	35	3.11	3.422 ***
Ability demonstrate enthusiasm for the hotel biz	43	3.67	37	3.78	-.976
Ability demonstrate success in a team environ.	43	3.67	37	3.81	-1.325
Ability demonstrate pos leadership skills work	43	3.6	37	3.81	-1.960
Slang/mannerisms	43	3.51	37	3.70	-1.463
Critical thinking ability	43	3.47	37	3.68	-1.921
Impression of candidate's "fit" with organization	43	3.44	37	3.57	-.921
Ability demonstrate previous success w/ conflict resolution	43	3.42	37	3.65	-1.694
Ability to demonstrate success in managing change	43	3.40	37	3.62	-1.733
Ability to demonstrate positive interest in diversity	43	3.35	37	3.41	-.360
One year previous work experience in the hotel industry	43	3.28	37	3.14	.738
Ability to demonstrate ability to positively develop other team members or subordinates	43	3.23	37	3.73	-3.719**
Leadership skills in program coursework	43	3.23	35	3.63	-2.799 **
Ability to demonstrate knowledge of the hotel industry	43	3.21	37	3.49	-1.981 **
Previous success in recruiting candidates from a particular program	43	3.05	36	2.86	.836
Business management skills in program coursework	43	2.95	36	3.33	-2.411 **
Positive references from faculty/previous hotel employer	43	2.95	37	3.16	-1.089
Ability to demonstrate knowledge of your particular hotel organization	43	2.93	37	3.16	-1.380
Ability to demonstrate positive leadership skills in extracurricular activities	43	2.93	37	3.46	-3.297 ***
Willingness to relocate	43	2.91	37	3.32	-2.124 **
Ability to articulate positive career path in hotel industry	43	2.77	37	3.68	-6.555 ***
Vocational skills in program coursework	43	2.72	36	2.97	-1.478
Technical ability in particular department of hotel	43	2.58	37	3.14	-3.415 ***
Grade point of 3.0 or higher	43	2.53	37	2.68	-.794
Score on behavioral testing	42	2.52	36	3.08	-2.624 **
Previous experience with particular hotel company	43	2.30	37	2.24	.287
Positive physical characteristics	42	2.14	37	3.16	-6.259 ***
Ranking of hosp. program among programs	43	2.02	36	2.94	-4.921 ***
Ranking of college or university	43	1.93	35	2.83	-4.781 ***
Geographic location of hospitality program	43	1.84	37	2.78	-4.165 ***
Home base of hospitality program within university	43	1.67	37	2.78	-6.076 ***

** - significance level < .05

*** - significance level < .001

Recruiters

- Recruiters gave a higher rating to positive references from work in the recruiters' hotel organization compared with the management trainees did (mean 3.70 compared to 3.11).

Management Training Candidates

Management training candidates gave higher importance ratings to the other thirteen candidate indicators and hospitality program attributes found to be significant. (Management candidates means listed first, recruiters means listed second.)

- Positive physical characteristics (mean 3.16 to 2.14).
- Technical ability in a particular department (mean 3.14 to 2.58).
- Score on behavioral tests (mean 3.08 to 2.52).
- Ability to articulate a positive career path in the hotel industry (mean 3.68 to 2.77).
- Willingness to relocate (mean 3.32 to 2.91).
- Demonstrate the ability to positively develop other team members or subordinates (mean 3.73 to 3.23)
- Ability to demonstrate positive leadership skills in extracurricular activities (mean 3.46 to 2.93).
- Geographic location of candidate's hospitality program (mean 2.78 to 1.84).
- Home base of program within department/school/college (mean 2.78 to 1.67).
- Ranking of candidate's hospitality program among hospitality programs (mean 2.94 to 2.02).
- Ranking of college or university (mean 2.83 to 1.93).
- Business management skills in program coursework (mean 3.33 to 2.95).
- Leadership skills in program coursework (mean 3.63 to 3.23).

DISCUSSION/INTERPRETATION/RECOMMENDATIONS

This study revealed that management trainees considered several candidate indicators to be more important in achieving a successful outcome than did the recruiters. The one notable exception was that recruiters ranked positive references from work in your hotel organization higher in importance compared to that of the management trainees. While there are several ways this finding might be interpreted, it suggests that students stand a better chance of a job offer as a management trainee if they have worked for the hotel company prior to graduating. General agreement found between recruiters and management trainees in the management competencies area was expected. Many studies (Roberts & Shea, 1996; Ross, 1995; Sciarini & Garner, 1995) include asking industry professionals to rate the management skills hospitality graduates will need to be successful in the industry. The agreement between the groups implies that present hospitality curriculum reflects what the industry is expecting.

The indicators that candidates rated higher suggest that, although the candidate has received an offer of employment, the offer may be for the reasons other than those he/she perceived as important in the recruitment process. For example, it is interesting to note that the candidates rated their positive physical characteristics more important than recruiters did. This phenomenon may be because recruiters are sensitive to discrimination laws and would avoid rating anything that might be seen as discrimination as important in the selection process. Alternatively, the candidates' rating positive physical characteristics as higher in importance may be a reflection of their own positive self-esteem.

Candidates also rated technical ability in a particular department as more important than recruiters rated it. The literature suggests that drawing people with problem-solving skills to the industry is critical (Roberts & Shea, 1996). Because entry-level management is often technical skill heavy, candidates may unintentionally place a higher level of importance on technical ability.

The management candidate's higher rating of the ability to articulate a positive career path in the hotel industry and a willingness to relocate is not surprising. Recent graduates who have dedicated years to achieving their degrees believe finding the right first job is very important for their overall career. This belief may mean the best opportunity requires relocating.

The two management competencies that were rated significantly different in this study were to be able to demonstrate the ability to positively develop other team members or subordinates and to be able to demonstrate positive leadership skills in extracurricular activities. Management trainees rated both of these management competencies higher in importance than recruiters did. Recruiters and management trainees rated management competencies as the most important.

The final six indicators that showed a significant difference could be explained by the recent graduates' loyalty to their new alma mater. The higher rating of geographic location of the program and the rating of both the hospitality

program and the college/university may reflect the fact that the student made a personal decision to attend a particular program at a specific college/university.

The differences between the ratings of the recruiters and the ratings of the management trainees suggest that further research may be needed to close the gap between what recruiters indicate they want in an ideal candidate and what qualities management trainees report they are.

Limitations of Study

Limitations of this study include the lack of control in choosing who participated in the study, the small sample sizes and the relatively low response rate in particular for the management trainee sample. The hotel companies' difficulties in communicating with management trainees made following up with this sample particularly difficult because many management trainees were in transition between a school and new job location. The small sample size in both samples restricts the opportunity to generalize this information to the greater hotel industry.

CONCLUSION

Findings from this study provide insight into how recruiters rate candidate indicators compared to how management trainees rate indicators in the recruiting process. The variances found between the recruiters' ratings and the management trainee ratings suggest that there are some discrepancies between what recruiters' rate as important and what the management trainees perceive as important in the interview process. These variances suggest that recruiters may not in fact use the indicators that they perceive and rate as important in their current selection process. The study also shows that most recruiters are female and between the ages 30 and 49 while management trainees are predominantly female and between the ages 20 and 29. Because of the small sample sizes, it is recommended that further studies be conducted in the area of management trainee recruitment.

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RELATIONSHIP BETWEEN ATTITUDINAL AND BEHAVIORAL LOYALTY DIMENSIONS

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ABSTRACT

A great deal of existing brand loyalty research primarily focused on the behavioral aspect although it has been claimed that using both attitude and behavior in a loyalty measurement substantially increases the predictive power of loyalty. Therefore, the purposes of the study were to investigate the association between two attitudinal loyalty constructs—individual's propensity to be brand loyal and brand specific loyalty—and to identify significant attitudinal loyalty construct(s) in predicting behavioral loyalty among hotel guests. Major findings and their implications were discussed.

Key Words: hotel loyalty, attitudinal vs. behavioral loyalty, canonical correlation analysis

INTRODUCTION

As the hospitality products/services are mainly intangible in nature, brand loyalty has been one of the popularly studied topics that numerous hospitality businesses have been interested in. Brand loyalty is defined as a behavioral response and a function of psychological processes (Tepeci, 1999). Although there are numerous ways to operationally define brand loyalty (Jacoby & Kyner, 1973), one of the recurring agreements about the definition of brand loyalty is that it should include two components; attitudinal and behavioral aspects. A great deal of existing brand loyalty research primarily focused on the behavioral aspect by examining the proportion of purchase, sequence of purchase, and probability of purchase (Sheth, Mittal, & Newman, 1999). However, Pritchard, Howard, and Havitz (1992) claimed that using both attitude and behavior in a loyalty measurement substantially increases the predictive power of loyalty.

LITERATURE REVIEW

Brand loyalty is a complex phenomenon; one variable cannot be expected to explain loyalty alone. Numerous researchers argue against using a single brand loyalty measure, e.g., behavioral or attitudinal (e.g., Backman & Crompton, 1991; Baldinger & Robinson, 1996; Bennett & Rundle-Thiele, 2002; Mellens, Dekimpe, & Steenkampe, 1996; Pritchard et al., 1991). Sheth et al. (1999) defined behavioral brand loyalty as the consistent repurchase of the same brand. While the behavioral aspect of the loyalty has been a popular topic in both business and consumer marketing, the challenge with behavioral brand loyalty is that it simply shows that customers repurchase the same brand, no matter whether they actually like the brand or not (Sheth et al., 1999).

According to Jacoby and Chestnut (1978), attitudinal loyalty is defined as "the consumer's predisposition towards a brand as a function of psychological processes." Also, attitudinal loyalty has been operationalized as a personality trait (Raju, 1980) as well as brand specific (Traylor, 1981; Martin, 1989; Martin & Goodell, 1991). This operationalization suggests two main ways in defining attitudinal brand loyalty: brand specific and individual propensity to be brand loyal. Particularly, an individual's propensity to be brand loyal, or the personality trait approach, relates to the characteristics of an individual customer, and positions attitudinal loyalty as a characteristic of the consumer regardless of the brand.

Day (1969) claimed that in order to be truly loyal, the consumer must hold a favorable attitude toward the brand in addition to purchasing it repeatedly. This warrants that the attitudinal loyalty concept needs to supplement behavioral loyalty approach in delineating consumer loyalty. Baldinger and Robinson (1996) examined the relationship between attitude and behavior brand loyalty in various consumer commodities. Results of the study concluded that the stronger the attitudinal commitment to the brand, the more likely consumers were to remain loyal to the brand. Specifically, respondents with attitudinal loyalty were almost three times as likely to remain loyal to the brand than those with only behavioral loyalty. This study empirically provided the importance of attitudinal loyalty in understanding brand loyalty in consumer marketing. Bennett and Rundle-Thiele (2002) reported that they are two separate concepts; specifically, the attitude towards the act of purchasing a brand can be used to explain or predict purchasing behavior in the business service

market. Consumer service (i.e., hospitality products/services) market endures different characteristics in terms of consumer reactions and responses to varying marketing concepts. However, no research studies have been conducted to answer whether the same relationships exist in the context of hospitality marketing. Therefore, the purposes of the study were to investigate the association between two attitudinal loyalty constructs—individual's propensity to be brand loyal and brand specific loyalty—and to identify significant attitudinal loyalty construct(s) in predicting behavioral loyalty among hotel guests.

METHODOLOGY

The survey questionnaire was developed based on brand loyalty studies from marketing in general and hospitality marketing in particular. Two loyalty constructs were assessed by a modified version of the instrument used by Bennett and Rundle-Thiele (2002) to reflect the context of lodging consumer behavior. Specifically, as for the attitudinal loyalty dimension, the brand specific loyalty items included one measure of commitment (5-point Likert scale), seven perceptions about staying at a hotel (5-point semantic differential scale) and a recommendation item (5-point Likert scale). The questions for individual propensity to be brand loyal consisted of seven personality trait items with a 5-point Likert scale (i.e. I usually recommend my preferred products to others). With respect to behavioral loyalty, three statements were asked with a 5-point Likert scale; future intention to choose the hotel brand, the probability of choosing the hotel brand next time, and past purchasing preference. Lastly, a series of demographic characteristics including gender, age, education, income, occupation, trip purpose, and frequent stay membership was asked.

Three international chain hotels were contacted and agreed to distribute questionnaires to their guests. Hotel guests were given a copy of questionnaire when they check in at front desks. The guests were instructed to return their completed questionnaires to the front desk during their stay. Of the 535 questionnaire distributed, a total of 251 respondents completed the survey, and their responses were used in the data analyses. Descriptive statistics were calculated for all survey items. A canonical correlation analysis was performed to examine the relationship between the set of variables measuring brand specific loyalty and the set of variables assessing individual propensity to be brand loyal. The MANOVA procedure in the Statistical Package for the Social Sciences (SPSS) was used to conduct the canonical correlation analysis (Norusis, 1990). A series of stepwise multiple regression analysis was carried out to determine which attitudinal loyalty construct is a better predictor of behavioral loyalty.

Major Findings

Demographic Profile

Slightly over half (52.8%) of respondents were male (see Table 1) and in the age brackets between 36 and 55 (58%). Slightly less than three-fourths (69.2%) of respondents attained a four-year college degree or higher, and 23.5% attended college or had a 2-year degree. Almost one-thirds (39.2%) reported an annual household income of \$85,000 or more and 30.4% earned between \$55,000 and \$84,999. Slightly over half (51.3%) of the respondent traveled for business and 16.3% for pleasure and 13.8% for visiting friends and relatives. Almost three-quarters (72%) of respondents was frequent stay membership holders with the hotel brand they were staying at.

Overall Attitudinal/Behavioral Loyalty

Among nine brand specific attitudinal loyalty items included, respondents strongly indicated that staying at the hotel brand during next trip would be 'good' ($X=4.57$), 'pleasant' ($X=4.57$), and 'favorable' ($X=4.47$) on a 5-point semantic differential scale. The mean of respondents' recommendation of the hotel brand to others was 4.39, which was higher than respondents' commitment to staying at the hotel brand ($X=3.81$). With respect to eight individual propensity to be brand loyal items, the statement, 'I usually recommend my preferred products to other people', received the highest mean of 4.23, followed by the statements, 'I would rather stick with a brand I usually buy than try something I am not sure of ($X=3.77$)' and 'If I like a brand, I rarely switch from it just to try something different ($X=3.76$)' (See Table 2) Respondents indicated a relatively high behavioral loyalty with a mean of 4.14 for their future purchasing intention (i.e., I will definitely choose this hotel brand for my next travel), 4.16 on the probability of next purchasing (i.e., The probability of my choosing this hotel brand for my next travel is very high), and 3.76 on purchasing preference over the last 12 months (i.e., In the last 12 months, this hotel brand was my first choice in the hotel selection.)

Canonical Correlation Analysis

The canonical correlation analysis with eight brand specific loyalty and nine individual propensity to be brand loyal items generated a total of six canonical variates (i.e., linear combination of the two sets of variables at the 0.001 level). Canonical correlation values ranged from 0.65 to 0.08. Tabachnick and Fidell (1989) suggested that canonical correlations between variables and variates in excess of .30 are only interpretable. Therefore, only four variates that satisfied this requirement were included in result interpretation. In table 1, the overall results of the canonical correlation analysis for these four variates retained are shown. The four variates explained 62.6% of the variation in brand specific

variables and 60.7% variation in individual propensity to be brand loyal variables. A total of 18.5% of the variance (redundancy) in brand specific loyalty was accounted for by the variability in personal propensity to be brand loyal, while individual propensity to be brand loyal explained 21% of the variance (redundancy) in brand specific loyalty, indicating a relationship between the two sets of variables did exist to different degrees.

Table 1
Results of Canonical Correlation Analysis

	Variate (Canonical Functions)			
	1	2	3	4
Canonical Correlation	.65	.55	.43	.41
Eigenvalue	.75	.43	.22	.20
Percentage of Variance Explained (%)				
Brand Specific Loyalty (62.6%)	21.9	17.4	7.5	15.6
Individual Propensity to be brand loyal (60.7%)	39.1	6.2	11.2	4.2
Redundancy (%)				
Brand Specific Loyalty (18.5%)	9.4	5.3	1.4	2.6
Individual Propensity to be brand loyal (21.0%)	16.7	1.9	2.1	.7

In interpreting the results of canonical correlation analysis conducted, the canonical loadings, or structure coefficients, were considered to depict the relationships between a variable and its canonical variates as suggested by Hair et al. (1998). The canonical loading reflects the variance that the observed variables shares with the canonical variate and can be interpreted like a factor loading in assessing the relative contribution of each variable to each canonical function (Hair et al., 1998). Table 2 contains the canonical loadings for the dependent and independent variates with four canonical functions emerged. Notably, five of six individual propensities to be brand loyal items were all bundled with three items in brand specific loyalty statements, suggesting that individual propensity to be brand loyal are strongly related to the some aspects of brand specific loyalty dimension.

Table 2
Canonical Loadings (Canonical Structure Correlations)

	Canonical Loadings				
	F 1	F 2	F 3	F 4	Mean
Correlations between the dependent variables and their canonical variates					
Brand Specific Loyalty ^a					
I have commitment for staying at this hotel brand.	.83				3.81
Staying at this hotel brand next time during my trip would be likely.	.61				4.29
Staying at this hotel brand next time during my trip would be positive.	.42				4.53
Staying at this hotel brand next time during my trip would be wise.		.70			4.37
Staying at this hotel brand next time during my trip would be good.		.60			4.57
Staying at this hotel brand next time during my trip would be favorable.				.59	4.57
Staying at this hotel brand next time during my trip would be desirable.				.56	4.52
I would recommend this hotel brands to others.				.53	4.39
Staying at this hotel brand next time during my trip would be pleasant.				.44	4.57
Correlations between the independent variables and their canonical variates					
Individual Propensity to be brand loyal ^a					
If I like a brand, I rarely switch from it just to try something different.	.85				3.76
I would rather stick with a brand I usually buy than try something that I am not sure of.	.84				3.77
I rarely take chances by buying unfamiliar brands even it means sacrificing variety.	.82				3.23
I would rather stick to well known brands when purchasing something.	.79				3.44
I would rather wait for others to try a new brand than try it myself.	.40				2.56
I usually recommend my preferred products to other people.			.85		4.23

Note: Variables with a canonical loading greater .40 were only included for interpretation.

Two items loaded with .40 were deleted from individual propensity to be brand loyal statements.

^a Scale: 7 = strongly agree, 1 = strongly disagree

Stepwise Multiple Regression Analysis

Three behavioral loyalty statements were entered as dependent variables in stepwise multiple regression analyses, respectively. A total of eight items in brand specific loyalty and nine items in individual propensity to be brand loyal were entered as predictors (independent variables) in the analysis. The first regression analysis showed that five brand specific loyalty items were valid predictors of the behavioral loyalty statement, 'I will definitely choose this hotel brand for my next travel.' No variables from individual propensity to be brand loyal construct was retained in predicting this behavioral loyalty (see Table 3). The second behavior loyalty statement, 'the probability of choosing this hotel brand for my next travel is very high', was predicted by four brand specific loyalty items and one individual propensity to be brand loyal item (i.e., If I like a brand, I rarely switch from it just to try something different.). Finally, three brand specific loyalty items and two individual propensities to be brand loyal items were identified as valid predictors of the last behavioral loyalty statement, 'In the last 12 months, this hotel brand was my first choice in the hotel selection.' Interestingly enough, the commitment item in brand specific loyalty, 'my commitment with staying at this hotel is strong,' was a valid predictor of all behavioral loyalty statements tested, concluding that commitment is a significant contributor to predicting behavioral loyalty as reported in numerous studies (i.e., Park, 1996; Sheth et al., 1999; Traylor, 1981).

Table 3
Results of Stepwise Multiple Regression Analysis

Dependent variable ^a	Predictor _a (Attitudinal Loyalty)	Beta	T value	C/T	VIF
<i>I will definitely choose this hotel brand for my next travel.</i> ($F = 81.95, p < .000$, Adjusted $R^2 = .66$)	Staying at this hotel brand next time during travel would be likely.	.38	6.36***	.4	2.22
	My commitment with staying at this hotel is strong.	.32	6.07***	.5	1.76
	Staying at this hotel brand next time during travel would be desirable.	.40	5.01***	.2	4.38
	Staying at this hotel brand next time during travel would be pleasant.	-.28	-3.33***	.2	4.63
	I would recommend this hotel brand to other people.	.13	2.42***	.6	1.67
<i>The probability of my choosing this hotel brand for my next travel is very high.</i> ($F = 86.82, p < .000$, Adjusted $R^2 = .67$)	Staying at this hotel brand next time during travel would be positive.	.39	7.07***	.5	1.94
	My commitment with staying at this hotel is strong.	.44	8.15***	.5	1.91
	I would recommend this hotel brand to other people.	.20	4.69***	.8	1.17
	If I like a brand, I rarely switch from it just to try something different.	-.17	-3.61***	.6	1.44
	Staying at this hotel brand next time during travel would be likely.	.16	2.64**	.4	2.37
<i>In the last 12 months, this hotel brand was my first choice in the hotel selection.</i> ($F = 62.33, p < .000$, Adjusted $R^2 = .62$)	My commitment with staying at this hotel is strong.	.71	12.30***	.5	1.72
	Staying at this hotel brand next time during travel would be desirable.	.43	4.91***	.2	3.93
	Staying at this hotel brand next time during travel would be favorable.	-.28	-3.24**	.2	3.98
	I would rather stick with a brand I usually buy than try something I am no sure of.	-.17	-3.38**	.7	1.35
	I usually recommend my preferred products to others.	.15	3.17**	.9	1.08

^a Scale: 7 = strongly agree, 1 = strongly disagree, ** $p < .01$, *** $p < .001$

CONCLUSION AND FUTURE RESEARCH

This study attempted to examine two attitudinal loyalty constructs and to identify a significant attitudinal loyalty predictor(s) of behavioral loyalty in the lodging market. Findings of the study concluded that two constructs comprising

attitudinal loyalty are associated with each other to some degree. This finding suggested that the magnitude of attitudinal loyalty may be different depending on business environment, particularly in consumer service markets.

In identifying which attitudinal loyalty construct contributes more to the explanation of behavioral loyalty, brand specific loyalty was identified as a more valid predictor of behavioral loyalty among hotel customers. This result is in line with the finding reported by Bennett and Rundle-Thiele (2002), concluding that brand specific loyalty can better explain actual behavioral loyalty than individual's propensity to be brand loyal. Therefore, it can be concluded that of the two attitudinal brand loyalty dimensions, brand specific loyalty may serve as a valid antecedent of behavioral loyalty in both business and consumer services settings.

The two constructs embedded in attitudinal brand loyalty were identified as overlapping dimensions in the lodging industry, concluding that these two concepts need to be 'fine-tuned' to represent distinctive characteristics of attitudinal brand loyalty. Also, a lack of predictive power of individual propensity to be brand loyal in explaining behavioral loyalty among hotel customers suggests that brand specific loyalty should be used to a valid antecedent of behavioral loyalty concept, while individual propensity to be loyal can supplement the complete description of brand specific loyalty construct conceptually and empirically.

Several cautions should be made in interpreting the results of the study. First, this study only employed three hotel chains that may not be a representative of the lodging industry. Additionally, 72% of the respondents were members of the frequent stay program. This fact may partially explain a relatively high level of behavioral loyalty. Third, while there are several methods in measuring a valid behavioral loyalty construct, this study employed three statements as proxies of behavioral loyalty, which may not be an exhaustive medium to capture behavioral loyalty among hotel customers. Additional variables that are known to assess the behavioral loyalty should be included to verify the findings of the study.

Similar to other constructs in consumer behavior and marketing research, loyalty is complex construct. Despite its importance, brand loyalty measurement, specifically attitudinal loyalty, has not flourished in the marketing literature (Chaudhuri & Holbrook, 2001). Most often, brand loyalty is measured neglecting its attitudinal component. The present study has moved toward considering both loyalty constructs, but there is room for further development in that direction and beyond. Research effort should be made to measure the dimensions of attitudinal constructs more reliably and validly in order to more accurately explain consumers' behaviors. Therefore, more in-depth study to uncover the attitudinal loyalty should be needed, including more refined instrument to reflect the context of the particular service/product. Specifically, future research using other populations, survey methods, and other types of business environments (i.e., different hotel brands) will be fruitful to expand the body of knowledge. Further tests of the scales' validity such as discriminant validity, concurrent validity, and predictive validity are also needed.

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AN INVESTIGATION OF POTENTIAL AND EXISTING VALUE OF THE ACCOUNTING INFORMATION FOR
MARKETING MANAGERS IN THE LODGING INDUSTRY

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ABSTRACT

Changes in the business environment have transformed the management philosophy. This transformation has changed management accounting practices. However many organizations still use conventional accounting techniques where product costs are the focus of the accounting. However, in the new business environment customer is the focus of business activities, not the product. This study investigates the potential and existing value of the accounting information for marketing managers in the lodging industry. The findings demonstrated that there is a gap between the information of what the current accounting system provides and what the marketers expect. The information gap varies depending on the types of accounting information.

Key words: lodging industry, accounting information, marketing decisions

INTRODUCTION

Over the past few decades, the business environment has changed dramatically in every area of business. Customer satisfaction and customer profitability became the paramount key to the success in many business organizations. In response, innovative management techniques are becoming increasingly popular. In line with these changes, management accounting has also had to change, in response to the changes in management philosophy. However, many business organizations still use conventional accounting techniques for managerial decision making including marketing decisions. In fact, the traditional accounting techniques no longer serve as useful tool in the new business environment as it did in the past. Managers are now realizing the diminishing usefulness of conventional accounting information. This becomes clear when they comprehend that the alternative accounting systems incorporate the major information elements in their specific areas.

From a decision making perspective, there is a strong link between the accounting information and marketing decisions. Relevant accounting information enables marketing managers to evaluate the performance of current marketing activities and make sound decisions for future strategies. Marketing managers use a wide range of financial and non-financial information from internal and external sources and utilize this information when making operational, tactical and strategic decisions. Based on this information, predictions are made about product/service costs, customers' ability to spend, sales revenue, customer profitability, and other inputs that will affect the success of a marketing operation. Other behavioral predictions are made in identifying the actions that have the potential to change customers' value to the organization. Decisions about new product developments, offering new services, and pricing strategies can positively or negatively affect the customers' value, thus the success of marketing operation.

Accounting systems in business organizations serve as a tool for quantifying business activities into useful information that generate positive outcomes. Success from the accounting information depends on the degree of its usefulness. Since the information need is generally extensive, managers tend not to be satisfied with the information provided to them by the current systems. Research provides evident that marketing managers are increasingly dissatisfied with the nature of the pricing information made available to them by their management accounting colleagues (Foster and Gupta, 1994).

Despite the importance of deriving useful information from the existing accounting systems, the present systems do not enlighten the way of marketing managers in their decision making process about how to maintain the pricing or costing systems in terms of maximizing the benefits from the marketing operation. The current accounting systems in the lodging industry do not adequately provide cost and pricing data for effective marketing decisions. However, market oriented decisions require specific cost and pricing information regarding the customers across the traditional departmental boundaries. Foster and Gupta (1994) reported that price setters criticized regularly their accounting systems, because of

unreliable accounting information due to inappropriate cost information based on poor cost allocation bases. Improving the cost analysis will often require changes in the management accounting principles (Innes & Mitchell, 1997).

The investigation of current accounting systems in the lodging industry establishes groundwork for the need of new approaches in cost and customer cost allocation to all market segments. Although, the current system yields some valuable insights, marketers need more precious information to decrease the uncertainty surrounding their marketing decisions. Concerns with uncertainty are very important, because if information is colored by uncertainty, then the marketing operation will probably be ineffective, at least in some certain areas. Thus, the current accounting systems need to be improved or restated in terms of providing more valuable or useful information to support marketing/business decisions. Therefore, lodging companies need exceptional accounting systems to support marketing strategies.

Purpose and Objectives

The purpose of this study is to describe how lodging marketing managers evaluate the current accounting systems in order to make better marketing decisions and to discuss future research directions in light of accounting and marketing applications. This paper's objectives are to:

1. Evaluate the existing body of knowledge in accounting, marketing and hospitality literature pertaining to issues that delve into accounting information and marketing decisions.
2. Describe how marketing managers evaluate the accounting information provided by the current accounting system.
3. Compare the potential and existing value of the accounting information as perceived by the marketers and find the probable information gaps.
4. Discuss research directions in light of accounting and marketing applications

In this study, the authors assess how lodging marketing managers perceive the value of the accounting information provided by their respective accounting systems. If accounting system provides useful information that generates highly positive outcomes, it is considered as most valuable; otherwise, it is less valuable. Naturally, the main criteria to judge whether the accounting information is valuable, depends on the judgment of marketing managers.

Accounting Information and Marketing Decisions in the Lodging Industry

Accounting information emerges as a critical element in making effective marketing decisions. Decision making in organizations takes place in the context of uncertainty or disagreement over both the objectives and consequences of action (Hopwood, 1980). Financial and non-financial information sources provide unprocessed data for marketers that need to be further developed into actionable, marketing information that improves the quality of decisions. Within this context, accounting information refers to financial, and marketing environment refers to non-financial information (see Figure 1). Traditionally, information derived from the marketing environment is used to evaluate customer satisfaction, customer preferences, quality of customers, customer feedbacks, spending capacity and level of current and future demands. On the other hand, accounting information is used to analyze sales volume, product/service costs, direct/indirect costs, cost to serve, pricing, and other financial outputs for an effective operation. An important source of intelligent for marketing decisions is therefore provided by the accounting function (Downie, 1996).

The decision process of marketing operation in the lodging industry is illustrated in Figure 1. This process has been developed from the analytical process of marketing activities that combines accounting information and the marketing environment to produce better financial results. As seen from the figure, marketers use financial and non-financial information to make optimal marketing decisions. Financial information is obtained from the accounting system and non-financial information is derived from the marketing environment. The degree and quality of interpretation of financial and non-financial information support marketing related decisions made by marketing managers. These decisions are generally related to changing, altering, dropping/adding new products/services, adjusting prices or re-organizing marketing activities. In the last step, the quality of the marketing related decisions improves the operational success or the bottom-line profitability of the lodging property.

Using accounting information to measure marketing performance has been advocated since the late 1920's (American Accounting Association, AAA, 1972). A sub committee of the AAA made the following statement to highlight the importance of financial information in marketing decisions:

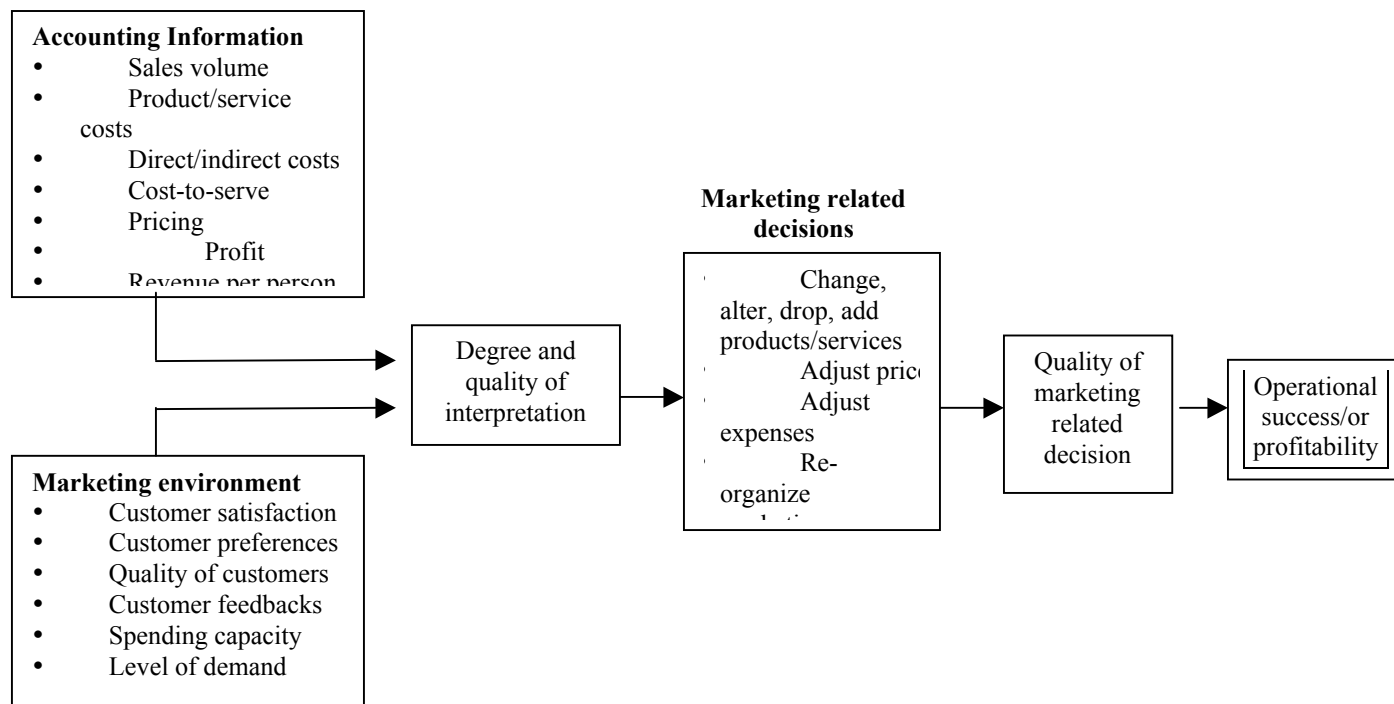
"Under the modern marketing concept, decision making is to focus on customer. Marketers need better financial measures to assess the economical contribution of their customers to the firm's bottom line."

In common with management accounting, in the early 1980's marketing had faced questioning about its relevance as a vital management function (Roslender and Hart, 2003). From the mid 1980's numerous authors and industry

professionals pointed out the inadequacy of the current accounting systems for marketing decisions². New management accounting techniques such as balance scorecard and customer profitability analysis (CPA) techniques have emerged as a reaction to the inadequacy of the traditional accounting techniques.

Figure 1
The Process Flow of Marketing Decisions from the Marketers' Point of View

Financial information



Non-financial information

Source: Developed by the authors

Shortcomings of the Current Accounting System

Previous studies show that the accounting information needed for managerial decision-making process is not always provided by the current accounting systems. For instance, Corbey (1995) has faced with this problem in his research in the design of management accounting information. Business organizations in many areas are not completely satisfied with their accounting systems for decision making and they would like to have better and more profound information (Karmarkar *et al*, 1990; Sullivan and Smith, 1993). A study conducted by Karmarkar *et al*, (1990) showed that the managers of 44 U.S. manufacturing plants agreed that their accounting systems fulfilled the requirements of external reporting and cost control, but fell short of satisfying their information needs in many areas of operation.

Similarly, the accounting systems used in the lodging properties are limited in their efforts to provide accurate and useful information in many areas of hotel operation. The challenging and competitive nature of the hospitality-operating environment emphasizes the importance of effective decision-making (Haywood, 1993). However, several shortcomings related to accounting system make worsen the marketing operation. For instance, if lodging companies do not employ customer profitability analysis (CPA) techniques they will probably fulfill their capacity with less profitable customers, instead more profitable ones. The current systems have several shortcomings including the information about customer costs, customer profitability, and allocating marketing costs among different market segments. Thus, marketing decision makers may be misled about the costs, determining their price strategies based on the misleading costs, and develop inappropriate price and profitability strategies.

² See. For example: Robert S. Kaplan and Thomas Johnson, "Relevant Lost-The Rise and Fall of Management Accounting," (1987), Boston, MA: Harvard Business School Press; Fred Selnes, "Analyzing Marketing Profitability: Sales are a Dangerous Cost-driver," European Journal of Marketing, Vol.26, pp.15-26; Cathy Burgess and Keith Bryant, "Revenues Management-the Contribution of the Finance Function to Profitability," International Journal of Contemporary Hospitality Management, Vol. 13, No. 3, pp. 144-150.

It is obvious that the current accounting systems have some serious limitations to produce relevant accounting information for marketing decisions. Richebacher (2003) gave some specific characteristics of these limitations:

1. Product/service costs are aggregated in accounts completely separate from customers. While room revenues are collected by market segments, costs are accumulated by departments. For customer profitability analysis both are needed at the customer level
2. Like products, costs, sales/marketing service costs are also collected in accounts separated from customers. This makes it impossible to calculate customer acquisition and service costs, which are two essential ingredients of customer profitability analyses.
3. Current accounting systems exist in isolation from each other due to fragmented operation units. This makes it difficult to create a single company-wide customer identification method.

Recent Managerial Accounting Tools in the Lodging Industry

The usefulness of the accounting information for decision-making has been a point of study by many researchers. Mia and Chenhall (1994) stated that the role of management accounting systems have evolved from a historic orientation providing only product costs for internal users and financial data for external users. In the new business environment, these systems should also focus on marketing concerns, cost-to-serve, customer profitability and other predictive information related to marketing decision areas.

The following accounting methods have emerged as a reaction of the deficiencies of the conventional accounting systems. These methods fulfill some important needs of the current systems in the lodging industry to extend the usefulness of traditional accounting systems on the basis that they improve the provision of accounting information for marketing decision-making (Downie, 1996):

- Cost Volume Profit (CVP) Analysis
- Profit Sensitivity Analysis
- Yield Management (YM)
- Rooms Value Engineering
- Market Segment Profit Analysis (MSPA)
- Pricing Techniques

Each of these techniques has some benefits and shortcomings to the performance of a lodging operation depending on specific situations. For example, cost volume profit analysis (CVP) assists managers in both profits planning and budgeting. CVP analysis can also be used to evaluate alternative courses of action in terms of generating profit for a period of time, a single department, and a promotional package or for the operation as a whole. The main goal of yield management is to maximize room revenue if space is available. Yield management may be successful in the short term for adjusting the prices to marketing conditions, but pricing decisions must be based on a more thorough analysis that includes revenues, costs and profit margins. Rooms Value Engineering is a technique that considers the cost elements of selling rooms: the cost of serving and the cost of materials (Lockwood and Jones, 1990). By using the MSPA model, hotel management will have a better understanding of the customer profile in terms of spending pattern, costs of product/services and profitability of customers.

METHODOLOGY

Sample and Data Collection

In order to gather related data, hotel marketers were used as the sampling frame for this study. The survey population comprised of 833 sales/marketing managers who were in charge of the sales/marketing departments of individual U.S. lodging properties and the current members of Hospitality Sales and Marketing Association International (HSMAI) as of October 2002. Eighty-six responses were received from the marketers, yielding a 10.3 % usable response rate (86/833). Although every effort was made to increase the response rate, it was not possible to go beyond this rate. Due to the low response rate, non-response bias was assessed by the researchers. It was found that non-response bias does not appear to be a problem with the sample.

Instrument

Data for the study was gathered through a web-based questionnaire. The main body of the questionnaire was modified from a previous study conducted by Foster and Gupta (1994). An instrument developed by Foster and Gupta (1994) provided the basic framework for developing the preliminary questionnaire for marketers. In order to assess the potential and existing value of the selected accounting tools, respondents were asked to evaluate these tools on a five point Likert-type scale. Next to each statement, two columns were given to mark the appropriate ranks. At the top of the first column, respondents were asked to "indicate how valuable accounting information potentially is to your decisions." At the

top of the second column, respondents were requested to, "indicate how valuable information from your existing accounting system is to your decisions." In each column, respondents were offered five choices ranging from 1 (least valuable) to 5 (most valuable) to judge the potential and existing value of the accounting information.

Data Analysis

This study comprised a descriptive and inferential study to investigate the potential and existing value of the accounting information. Inferential statistics were employed in finding the differences between potential and existing value. Paired-sample mean *t*-test was employed in order to determine whether there is a statistically significant difference (information gap) between the potential and existing value of the accounting information.

RESEARCH FINDINGS

Potential and Existing Value of the Accounting Information

In order to assess the potential and existing value of the accounting information marketers were provided nine accounting tools categorized under three groups as shown in Table 1: (1) marketing/business decisions, (2) cost related decisions for different market segments, and (3) decisions related to the allocation of total marketing costs among different market segments. Mean differences between potential and existing values are illustrated in column 3, which is labeled "information gap." The weighted differences were calculated by multiplying the mean differences of column 1 and 2 by the means of column 1. The weights were used because simple linear differences of the mean responses (between column 1 and 2) were not sufficient to explain the relative importance of the given statements.³

Table 1
Potential and existing value of the accounting information in marketing decisions

(n=86)

Accounting Information	Potential Value (1)	Existing Value (2)	Information Gap (3)**
1. Marketing/business decisions			
A. Pricing decisions	3.94 (4)	3.51 (4)	1.69 (3)
B. Customer mix decisions	3.69 (7)	3.27 (6)	1.55 (4)
C. Product/service mix decisions	3.60 (8)	3.22 (7)	1.37 (7)
D. New service development decisions	3.78 (5)	3.33 (5)	1.70 (2)
2. Cost related decisions for different market segments			
A. Advertising costs	4.09 (1)	3.74 (1)	1.43 (6)
B. Sales promotions costs	4.08 (2)	3.72 (2)	1.47 (5)
C. Sales force management costs	3.95 (3)	3.64 (3)	1.22 (8)
D. Public relations costs	3.41 (9)	3.06 (8)	1.19 (9)
3. Decision related to how to allocate the total marketing budget among different market segments	3.73 (6)	3.20 (9)	1.98 (1)

(1) Potential Value= "How valuable accounting information potentially is to your decisions?"

(2) Existing Value = "How valuable information from your existing accounting system is to your decisions?"

(3) Information Gap= Weighted differences between column 1 and column 2.

*Mean value scale: 1=least valuable to 5= most valuable

**The weighted difference is given by the difference in the mean response for column 1 and 2, multiplied by column 1.

1 indicates highest and 9 indicates lowest gap between potential and existing value.

The analytical framework of this section is adopted from Foster & Gupta's (1994) study.

The statements in the table were ranked from 1 to 9 according to their mean values (1 = highest, and 9 = lowest). The numbers in the parentheses next to each mean value show the ranking number of each statement. "Advertising costs" "sales promotion costs", "sales force management costs", "pricing decisions" and "new service development decisions" in both columns were ranked respectively. The remaining four accounting tools had asymmetric rankings in potential and existing value columns. The "information gap" column highlights the magnitude of differences between potential and existing values of the given accounting tools. The number 1 (in the parenthesis) shows the highest gap whereas number 9 shows the lowest gap.

³ George Foster, pp. 43-77

Table 2 was prepared based on Table 1 and shows the information gaps between potential and existing values of the accounting information ranked in order from 1 to 9. While the number 1 shows the highest gap (or dissatisfaction), number 9 shows the lowest gap (or satisfaction). As seen from the table, respondents were most dissatisfied with their existing accounting information in the areas of (1) “decisions related to how to allocate the total marketing budget among market segments,” (2) “new service development decisions,” (3) “pricing decisions,” and (4) “customer mix decisions.” Sales promotion costs (5), advertising costs (6), product/service mix decisions (7), sales-force management costs (8), and public relation costs decisions (9) were ranked relatively low in their perceived information gap.

The analysis of the data shows that the accounting information given in the nine areas are evaluated differently by the marketers. Hotel marketers placed more importance on the potential value of the accounting information than the existing value, especially in the areas of: (1) marketing budget allocation among different markets, (2) new service development decisions, (3) pricing decisions, and (4) customer-mix decisions. In other words, in most areas, the current accounting systems did not supply the same level of information as it was expected by the marketers.

Table 2
Potential and existing value of the accounting information
(Ranked according to the magnitude of the information gap)

Accounting Information	Potential Values*	Existing Values*	Information Gap**
Decision related to how to allocate the total marketing budget among different market segments	6	9	1
New service development decisions	5	5	2
Pricing decisions	4	4	3
Customer mix decisions	7	6	4
Sales promotions costs	2	2	5
Advertising costs	1	1	6
Product/service mix decisions	8	7	7
Sales force management costs	3	3	8
Public relations costs	9	8	9

* 1 indicates highest and 9 indicates the lowest mean

** 1 indicates highest and 9 indicates the lowest gap between potential and existing value

Differences between Potential and Existing Value

In order to determine whether there is a statistically significant difference (information gap) between the potential and existing value of the accounting information, the paired-sample mean *t*-test was employed for the nine areas of the accounting information (see Table 3). Positive *t*-scores indicate that the potential values of some particular accounting information are higher than their existing values. A number less than 0.05 in the significance column indicates that the difference is statistically significant. The statistical results show that the accounting information given in the nine areas was statistically significant between potential and existing accounting values. An examination of Table 3 shows the following statistical results under three categories.

Marketing/Business Decisions:

As seen in Table 3, the paired sample *t*-test showed that all four statements categorized under marketing/business decisions were statistically significant. The statistical results show that hotel marketers placed more importance on the potential value than the existing value. In other words, the current accounting information did not supply the same level of information as was expected by the marketers.

Cost Related Decisions for Different Market Segments:

Four types of cost information related to four different marketing activities were tested in terms of potential and existing values as perceived by the marketers: (1) advertising costs, (2) sales promotion costs, (3) sales-force management costs, and (4) public relation costs. Paired sample mean *t*-test resulted in significant differences for all cost accounting information. The statistical results of the paired sample mean *t*-tests showed that the value of the cost information provided by the accounting department related to the four types of cost information was not as valuable as expected potential value by the marketers.

Table 3
Statistical results of potential and existing value of the accounting information(n=86)*

Variables	Potential Value ¹		Existing Value ²		Differences			
	Mean	SD	Mean	SD	Mean	SD	t ³	Sig ⁴
Marketing/business decisions								
Pricing Decisions	3.94	1.131	3.51	1.125	0.43	1.012	3.942	0.000
Customer mix decisions	3.69	1.087	3.27	1.111	0.42	1.090	3.562	0.001
Product/service mix decisions	3.60	1.044	3.22	1.089	0.38	0.923	3.857	0.000
New service development decisions	3.78	1.142	3.33	1.183	0.45	1.059	3.971	0.000
Cost related decisions for different market segments								
Advertising costs	4.09	1.081	3.74	1.257	0.35	0.743	4.326	0.000
Sales promotion costs	4.08	0.985	3.72	1.175	0.36	1.073	3.116	0.003
Sales-force management costs	3.95	1.028	3.64	1.157	0.31	0.853	3.395	0.001
Public relations costs	3.41	1.172	3.06	1.268	0.35	1.145	2.824	0.006
Decisions how to allocate the total marketing budget among different market segments								
	3.73	1.111	3.20	1.362	0.53	1.271	3.902	0.000

1= Least valuable to 5= Most valuable

Potential value¹ = "How valuable accounting information potentially is to your decisions"

Existing value² = "How valuable information from your existing accounting system is to your decisions"

³= Paired sample *t* test

⁴= Significance

* Degrees of freedom (df) for all categories is 85.

Decisions on How to Allocate the Total Marketing Budget Among Market Segments:

The paired sample mean *t*-test results showed that there was a significant difference between potential and existing value of the accounting information related to "how to allocate the total marketing budget among different market segments." This suggests that the information provided by the accounting department related to, "how to allocate total marketing budget among market segments" is under-valued by marketers. Therefore, information provided by the accounting department was not valuable as perceived by the marketers for making effective marketing decisions.

CONCLUSION AND IMPICTATIONS

The purpose of this study was to investigate the potential and existing value of the accounting information for the marketing managers in the lodging industry. One of the important issues facing behavioral accounting researchers is the manner in which accounting information influences marketing decision-making (Foster & Gupta, 1994) and how this accounting information is valued by the marketers. In this survey, it was found that marketers ranked some specific accounting information as the most important potential source for their decisions. However, some marketers evaluated their existing systems as inadequate for the marketing decisions. There is a gap between the information of what the current accounting system provides and what the marketers expect. The information gap varies depending on the types of accounting information. These findings indicate that the current systems should be improved in order to satisfy the information needs of marketing decision-makers in terms of improving the effectiveness of marketing operation. Particularly, respondents were most dissatisfied in the following four areas:

- (1) Decisions related to how to allocate the total marketing budget among market segments
- (2) New service development decisions
- (3) Pricing decisions, and
- (4) Customer mix decisions

Decisions in these areas fall into strategic marketing decisions and marketers tend to put more emphasis on these decisions. Therefore, the information gaps in these areas are on the higher end of the scale. These high differences were perceived as the areas where improvements would be highly valued by marketers. Cost related decisions such as sales

promotion costs, advertising costs, product/service mix decisions, sales-force management costs, and public relation costs for different market segments are tactical types of decisions and tend to show low information gap. This means that in these areas marketers had high level of satisfaction for the data provided from the existing systems.

This study represents that marketing managers put high importance on the tools providing revenue information. However, there is a lack of information for managers regarding the pricing and profitability implications of their decision-making. Cost related items received least attention from the marketers. This supports the general view of the marketing approach that marketers have traditionally focused on revenues and attraction of customers.

The findings of this study are useful for both practitioners and researchers and have important accounting and marketing implications. In the absence of relevant financial data, marketing managers frequently rely on non-financial information or intuition to achieve the marketing goals of the organization. Because of the nature of the lodging business, non-financial data often misdirect and fail to reach the targeted profit goal of the organization. Realizing the limitations of the current accounting systems and recognizing the potential competitive advantages of relevant cost information, hoteliers need to adopt new accounting techniques to gain competitive advantage. There are many opportunities to develop the current provision of the accounting information for marketing decision making. Researchers and practitioners suggest using new accounting techniques that provide reliable and relevant accounting information to improve the quality of marketing operation in the lodging industry.

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THE BIG-FIVE PERSONALITY DIMENSIONS AND EMPLOYEE JOB BURNOUT

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ABSTRACT

This study investigates the effect of the Big Five personality attributes on hotel employees' job burnout. After controlling for two commonly known burnout antecedents (autonomy and workload), the analysis indicates that personality dimensions are significant predictors of the three job burnout factors. The exhaustion component of job burnout was influenced by extraversion and neuroticism; the cynicism component was affected by agreeableness and neuroticism; and professional efficacy was influenced by conscientiousness and agreeableness. Implications on the findings are discussed.

Key Words: job burnout; Big Five; hotel

INTRODUCTION

The hospitality industry is commonly described as a people industry. This reflects the nature of hospitality jobs, which requires extensive customer contact on a daily basis. Such a work situation has been reported to be stressful for hospitality personnel. For example, Bitner, Booms, and Mohr (1994) have found that employees in restaurants, hotels, and airlines selected dealing with problem clients as one of the most unpleasant incidents at their workplace. Pavesic and Brymer (1990) have discovered that long working hours including nights and weekends, low pay, and stress from demanding supervisors and duties are contributing reasons why young talented hospitality employees decide to leave the industry. Overall, both managers' and frontline personnel's job stress has been well documented in the hospitality and tourism context (Tabacchi, Krone, & Farber, 1990; Zohar, 1994; Law, Pearce, & Woods, 1995; Brymer, Perrewé & Johns, 1991; Vallen, 1993).

Industry psychologists have recognized that individuality makes a difference in handling stressful work situations (Maslach, Schaufeli, & Leiter, 2001; Tokar, Fischer, & Subich, 1998). In other words, what is stressful for one may not be stressful for another. Although the success of hospitality firms heavily relies on individual employees who are capable of performing the job under stress, very little empirical research has been conducted in relation to the effect of individual characteristics, in particular, associated with personality. Therefore, this study aims to identify the role of personality dispositions in understanding hospitality employees' job burnout in the hotel work setting.

JOB BURNOUT

A group of psychologists consider job burnout as a type of stress, which is one-dimensional (Cordes & Dougherty, 1993). Others view it as multi-dimensional and the current consensus is that job burnout is composed of three sub-constructs: emotional exhaustion, depersonalization, and personal accomplishment (Maslach & Jackson 1981). Emotional exhaustion refers to a lack of energy and a feeling that one's emotional resources are used up because of excessive psychological demands. Depersonalization is characterized by the treatment of others as objects rather than people through cynical, callous, and uncaring attitudes and behaviors. Diminished personal accomplishment denotes a tendency to evaluate oneself negatively because of one's failure to produce results. These three sub-dimensions were renamed exhaustion, cynicism, and professional efficacy after development of MBI-GS (The Maslach Burnout Inventory-General Survey; Schaufeli, Leiter, Maslach, & Jackson, 1996).

The antecedents of job burnout receiving consistent support include role conflict, role ambiguity, workload, customer contact, social support, and job autonomy (Cordes & Dougherty, 1993). These variables have been classified into two categories: demands and resources. Demands are defined as "physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs" (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001, p. 499). Resources refer to "physical, social, or organizational aspects of the job that may be: 1) functional in achieving work goals and 2) reducing job demands and the associated physiological and psychological costs, and 3) stimulating personal growth and development." (Demerouti et al., 2001, p.499). If the above categorization is adopted, role stressors (role conflict and role ambiguity) and work overload can be classified as job

demands, whereas social support and job autonomy can be regarded as job resources. Job demands have been positively associated with emotional exhaustion and depersonalization, but negatively correlated with personal accomplishment (Lee & Ashforth, 1996). Contrary to job demands, resources have been negatively correlated to emotional exhaustion and depersonalization, but positively correlated to personal accomplishment (Lee & Ashforth, 1996).

Relationship Between the Big Five Personality and Burnout

In addition to work environment variables (job demands and resources), several psychology experts have emphasized personality traits as feasible predictors of job burnout. First, extraversion reflects individual traits such as being sociable, gregarious, assertive, talkative, and active. Mount and Barrick (1998) found that extraversion was a valid predictor for two occupations involving social interactions: managers and sales. Mills and Huebner (1998) discovered that extraversion was related to job burnout after controlling for stressful occupational events and demographic variables. Given the nature of the hotel industry, which requires numerous social skills, it is natural to expect extraversion to play a key role in hotel job performance. Therefore, extraversion was hypothesized to negatively influence the two job burnout dimensions (exhaustion and cynicism), but positively affect professional efficacy in the hotel work setting.

Second, agreeableness reflects individual differences in warmth, friendliness, kindness, and empathy in social interactions, which helps inhibit interpersonal conflicts against other individuals. Unlike extraversion, studies focusing on agreeableness in relation with job burnout and job performance have been fewer and the findings have been inconsistent. For example, Barrick and Mount (1991) proposed that both extraversion and agreeableness affect job performances of sales personnel and managers that require interpersonal skills. However, after their meta-analysis, only extraversion was revealed as a significant predictor of job performance. They concluded that the agreeableness trait such as being courteous, trusting, and soft-hearted have a smaller impact on job performance than the extraversion trait such as being talkative, active, and assertive. Using the Dutch working population, De Vries and Van Heck (2002) found no significant relationship between fatigue and agreeableness. On the other hand, other researchers reported a negative effect of this personality trait on emotional exhaustion (Piedmont, 1993) and depersonalization of three job burnout components (Piedmont, 1993; Zellars, Perrewe, & Hochwarter, 2000). In general, for hotels to be profitable, repeat business is critical. Employees high in agreeableness are likely to help manage a long-term positive relationship with guests. Therefore, the authors postulated that agreeableness would be negatively associated with exhaustion and cynicism, but positively with professional efficacy.

Third, conscientiousness explains individual's dependability (careful, thorough, responsible, and organized) and volition (hardworking and achievement-oriented). Conscientiousness has been reported as the most important disposition in its relationship with job performance across five major occupations: professionals, police, managers, sales, and skilled/semi-skilled (Barrick & Mount, 1991). De Vries and Van Heck (2002) reported that conscientiousness was negatively related to high fatigue scores. Deary, Blenkin, Agius, Endler, Zealley, and Wood (1996) found that conscientiousness was positively associated with personal achievement, which was close to in meaning professional efficacy. Therefore, conscientiousness was expected to affect hotel employees' job burnout in the same direction as the traits of extraversion and agreeableness - a negative influence on exhaustion and cynicism but a positive effect on professional efficacy.

Fourth, neuroticism reflects individual differences in anxiousness, depression, anger, embarrassment, emotionality, worry, and insecurity. Allen and Mellor (2002) found that neuroticism had a significant relationship with exhaustion, cynicism, and reduced professional efficacy in their cross-sectional studies using a group of nurses. A longitudinal study by Goddard, Patton, and Creed (2004) indicated that neuroticism was associated with all three MBI subscales in a sample of employment service case managers. Therefore, in this study, neuroticism was hypothesized to affect employees' burnout in hotels in the opposite direction of extraversion, agreeableness, and conscientiousness. That is, neuroticism would have a positive influence on the exhaustion and cynicism dimensions of burnout, but have a negative impact on professional efficacy in the hotel work setting.

The last personality trait, openness to experience represents individual differences pertaining to intelligence, breadth of interests, and creativity. To the authors' knowledge, this trait has been largely irrelevant to one's job burnout with only one exception of the research done by Zellars, Perrewe, and Hochwarter (2000). Their study reported openness to experience as a significant determinant of job burnout in the health care industry. Because too few studies have confirmed the effect of this trait, no relations were suggested between this personality disposition and hotel employees' job burnout in the present research. The five research hypotheses proposed earlier are summarized as follows:

Hypothesis 1: Extraversion will have a significant and negative influence on exhaustion and cynicism but have a significant and positive effect on professional efficacy in the hotel work setting.

Hypothesis 2: Agreeableness will have a significant and negative influence on exhaustion and cynicism but have a significant and positive effect on professional efficacy in the hotel work setting.

Hypothesis 3: Conscientiousness will have a significant and negative influence on exhaustion and cynicism but have a significant and positive impact on professional efficacy in the hotel work setting.

Hypothesis 4: Neuroticism will have a significant and positive influence on exhaustion and cynicism but have a significant and negative effect on professional efficacy in the hotel work setting.

Hypothesis 5: Openness to experience will not exert any significant effect on job burnout in the hotel work setting.

METHODOLOGY

Subjects and Data Collection Procedure

A total of eight lodging properties participated in this study. All of them are chain affiliated and located in Washington State. The authors contacted several key industrial individuals such as general managers and regional human resource directors of the participating chains. Following their approval for this study, the human resource manager of each unit served as the onsite study coordinator. The two consecutive paydays were used for data collection; on the latter payday, the follow-up questionnaires were sent with a remainder message. After mailing their survey form directly to the first author, respondents were instructed to inform the coordinators of their participation in the study. As an incentive, Cougar Gold cheese was awarded to 10 % of the subjects on a lottery basis. A total of 1,001 surveys were distributed and 197 were returned (20 % response rate). Six were removed due to inadequate or too much missing information, thereby totaling 191 useable questionnaires.

62.3% of the subjects (n=119) were females. The subjects' ages ranged from 19 years to 73 years with a mean of 36 years old. The average hotel work experience was six years and seven months. The subjects came from a variety of departments: Front office (n=39, 20.4%), restaurants (n=38, 19.8%), sales and marketing (n=25, 13.1%), housekeeping (n=23, 12.0%), catering (n=20, 10.5%), others (n=15, 7.9%), engineering (n=11, 5.7%), and room service (n=7, 3.6%).

Questionnaire

Subjects completed personality and job burnout questionnaires. The IPIP (International Personality Item Pool; Goldberg, 2001) with a total of 50 items was used to evaluate respondents' five personality traits: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Each personality sub-measure was comprised of ten statements and all items were rated on a five-point response scale (1: very inaccurate and 5: very accurate). Job burnout was measured by MBI-GS (The Maslach Burnout Inventory-General Survey; Schaufeli et al., 1996). The instrument, which had a total of 16 statements, was composed of three subcategories: exhaustion (5 items), cynicism (5 items), and professional efficacy (6 items). Each item was rated using a 7-point Likert-type scale (1: never and 7: always).

Next, participants were asked to indicate the level of workload and autonomy in their work place. Workload was measured with a five-item scale developed by Spector and Jex (1998). All five statements focused on quantitative workload and were rated on a 5-point Likert-type scale (1: never and 5: always). Autonomy was assessed with a four-item scale developed by Marchese and Ryan (2001). An example of an autonomy item is "My job allows me to take part in making decisions that affect my work." Respondents rated statements using a five-point Likert scale (1: strongly disagree and 5: strongly agree). The coefficient reliability alpha values of all scales are reported in Table 1. The questionnaire also included several items pertaining to demographic characteristics such as gender, age, department, month(s) and/or year(s) of the hotel work experience.

Data Analysis

A series of hierarchical regression analyses were used as a major statistical technique to test research hypotheses regarding the effects of personality traits (independent variables) on hotel employees' job burnout (dependent variable). In the proposed model, besides the Big-Five personality, two additional independent variables (workload and autonomy) were included. The previous literature indicates workload and autonomy as the most widely accepted job burnout antecedents. Therefore, these two attributes entered the model first as control variables for the purpose of partialing out of their effects (step 1). Then, five personality factors, which were the focus of this study, were added into the equation (step 2). These hierarchical steps were repeated for each of the three job burnout components: exhaustion, cynicism, and professional efficacy. Demographic characteristics (gender, age, department, and year(s) of employment) were subjected to a series of ANOVA tests concerning any group differences in employees' job burnout. No significant differences were detected in the job burnout dimensions based on demographic grouping. Several researchers have demonstrated that the more homogeneous the study population, the fewer demographic differences in fatigue will appear (De Vries & Van Heck, 2002). Therefore, all hierarchical regression analyses suggested earlier were carried without controlling for the effects of demographic attributes.

The Pearson Correlation Coefficient values were reviewed to investigate correlations among variables, including

independent and dependant variables (see Table 1). Directions of the correlations between independent (workload and autonomy and five personality traits) and dependent (job burnout) variables were fairly consistent with outcomes of previous research. Tolerance values were used to examine the presence of multicollinearity among independent variables. Small tolerance values represent high multicollinearity with a common cutoff point of .10. (Hair, Anderson, Tatham, & Black, 1995). All variables had tolerance values greater than .78 implying no presence of multicollinearity.

Table 1
Correlation Matrix of Study Variables

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Workload	3.52	.73	(.79)									
2. Autonomy	3.60	.87	.05	(.74)								
3. Extraversion	4.38	.75	.01	.23**	(.89)							
4. Agreeableness	4.81	.57	-.04	.23**	.29**	(.82)						
5. Conscientiousness	4.77	.58	.03	.15*	.16*	.25**	(.81)					
6. Neuroticism	2.96	.65	.09	-	-	-	-	(.84)				
7. Openness	4.24	.55	.03	.19**	.43**	.33**	.19**	-	(.77)			
8. Exhaustion	2.72	.95	.45**	-	-	-	-.13	.44**	-.09	(.89)		
9. Cynicism	2.48	.96	.06	-	-	-	-.10	.39**	-.03	.57**	(.82)	
10. Prof. efficacy	4.14	.57	.09	.43**	.23**	.41**	.34**	-.09	.23**	-	-	(.68)
										.24**	.29**	

Note: For autonomy, workload and Big Five personality, scales range from 1 to 5. For exhaustion, cynicism and professional efficacy, scales range from 1 to 7. Values in () are coefficient alpha reliabilities.

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

FINDINGS AND DISCUSSION

Table 2 presents the results of the hierarchical regression analyses. Overall, the model for emotional exhaustion was significant, $F(7, 182) = 8.94, p < .05$, explaining a total of 42% of the variance. In step 1, both workload ($\beta = 0.46, p < .01$) and autonomy ($\beta = -0.27, p < .01$) were found to be influential predictors of the exhaustion component of job burnout. After five personality traits entered the equation (in step 2), there were significant increments in R^2 ($\Delta R^2 = .15, p < .01$). Two personality dispositions (i.e., extraversion and neuroticism) displayed significant beta coefficients ($p < .05$). Further, the sign of beta coefficients suggested that extraversion ($\beta = -.13$) had a negative relationship with exhaustion whereas neuroticism ($\beta = .32$) had a positive relationship with exhaustion. Next, the overall regression model for cynicism was significant, $F(7, 182) = 8.94, p < .05$, explaining 26% of the variance. In step 1, only autonomy ($\beta = -0.28, p < .01$) predicted levels of cynicism significantly. The entry of five-factor personality added 18% of the variance to the equation ($\Delta R^2 = .18, p < .01$). Agreeableness ($\beta = -.24$) had a negative impact on cynicism while neuroticism ($\beta = .30$) showed a positive effect on cynicism. Lastly, the model for professional efficacy was significant, $F(7, 182) = 14.26, p < .05$ with a R^2 of .35. As with a cynicism model, autonomy ($\beta = 0.43, p < .01$) was the only significant determinant of two control variables. In the following step, five personality traits contributed 16% of the variability to the professional efficacy model ($\Delta R^2 = .16, p < .01$). Agreeableness ($\beta = .28, p < .01$) and conscientiousness ($\beta = .24, p < .01$) were revealed to have significant and positive beta coefficients, suggesting positive impacts of these two dispositions on professional efficacy. In sum, all personality dispositions in question appeared to influence some components of job burnout in the way postulated. Therefore, Hypotheses 1, 2, 3, and 4 regarding extraversion, agreeableness, conscientiousness, and neuroticism were partially supported. The last hypothesis (Hypothesis 5) in relation to no effect of openness to experience on job burnout was fully supported as a result of no significant relationship between the trait and any job burnout attributes.

Of all independent variables, autonomy is the only variable that shows consistent effects on all three burnout factors. In hotels, many service encounters require immediate action from frontline personnel to fulfill customers' needs. Autonomy seems to alleviate lodging employees' emotional exhaustion by allowing them to make their own decisions so

that perhaps they can respond to guests' desires more efficiently and effectively. It also appears to serve as a deterrent of becoming cynical because they have the authority to provide personalized services for guests whenever necessary without seeking permissions from upper management. After seeing guests satisfied, hotel workers are likely to feel good about their jobs, which probably leads to an increase in their professional efficacy.

The agreeableness trait is a useful predictor of two job burnout dimensions (cynicism and professional efficacy) in the lodging segment. This trait has been described as the love and warmth dimension of personality. Therefore, it is least likely that they see others as objects. Following this logic, it may be a natural consequence that this personality disposition is negatively related to cynicism. In general, guests staying in hotels want to be pampered and ask for individual attention. Hotel employees high in agreeableness appear to be the best group of people who are capable of attending to these guests' demands. After services are provided successfully, these individuals are likely to be satisfied with their performance, thereby boosting their professional efficacy.

Conscientiousness is positively related to only one of the job burnout dimensions (professional efficacy). The association of conscientiousness with professional efficacy is much more sensible than any other personality construct. Conscientiousness has been considered most essential in predicting job performance criteria (Barrick & Mount, 1991). Strong responsibility, organizational skills and steadiness, which characterize conscientiousness, may be accountable for this significant relationship. That is, individuals who have a high level of conscientiousness strive to complete their duties, in turn, this mastery experience leads to an increase in self- and professional efficacy. This study shows that hotel employees are not an exception.

Neuroticism (negative affectivity) is the best-known personality trait in its relationship with occupational stress and has the least controversy among scholars (Chen & Spector, 1991; Jex & Spector, 1996). Extraversion is the second commonly understood personality because of its role as positive affectivity. Overall, the findings of this study regarding neuroticism and extraversion are in line with previous outcomes reporting these two variables as significant predictors of emotional exhaustion, which is often viewed as the core dimension of job burnout (Cordes & Daugherty, 1993).

Table 2
Hierarchical Regression of Three Job Burnout Components

Independent variables	Dependent variables					
	Emotional exhaustion		Cynicism		Professional efficacy	
	R^2	R^2	R^2	R^2	R^2	R^2
Step1: Control variables	.27**		.08**		.19**	
Workload	.46**		.07		.07	
Autonomy	-.27**		-.28**		.43**	
Step2: Personality variables	.42**		.26**		.35**	
Extraversion	-.13*		-.10		.06	
Agreeableness	-.08		-.24**		.28**	
Conscientiousness	-.03		.02		.24**	
Neuroticism	.32**		.30**		.11	
Openness to experience	.08		.10		.03	

Note: For emotional exhaustion, Model: $F(7, 182) = 18.50, p < .01$; for cynicism, Model: $F(7, 182) = 8.94, p < .05$; and for professional efficacy, Model: $F(7, 182) = 14.26, p < .05$. * $p < .05$; ** $p < .01$

CONCLUSIONS AND IMPLICATIONS

Within the hospitality and tourism domain, most existing studies have investigated causes of burnout with a focus on the work environment including role stressors, organizational structures, and job characteristics. This study fills the gap between hospitality academia and the hotel industry where personality measures have been a popular tool for the purpose of hiring and placement. The results of this study seem to justify the use of personality testing in the hospitality industry by demonstrating a significant impact of individual personality on job burnout. One of the most significant findings in the present research is the predictability of agreeableness in two job burnout dimensions (cynicism and professional efficacy). For the lodging industry, emphasis must be placed on the need for right personnel who can interact with guests in a friendly and charming (characteristics of the agreeableness disposition) manner at all times. Hiring employees with this trait can be even more critical for the success of up-scale lodging properties than say, budget hotels because guests' expectations are higher on personalized services. Note that agreeableness has been debatable in other disciplines because of inconsistent results in its relation with job burnout and performance. Therefore, it is necessary to replicate this study using various

hospitality segments including restaurants, airlines, and tour companies to validate the value of this trait in the hospitality industry.

Lastly, this study found that empowered (autonomy in this study) employees are less likely to experience job stress (emotional exhaustion), treat guests more personally (cynicism) and feel proud of their job (professional efficacy). Therefore, practitioners should consider utilizing this concept more extensively and provide training for their employees to use their autonomy appropriately in such a manner that they can maximize their customers' satisfaction. In summary, hiring individuals with right personality traits and empowering them seem to be the key recipe for successful hotel operations.

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A STUDY OF PERCEIVED RISK AND RISK REDUCTION OF OF PURCHASING AIR-TICKETS ONLINE

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ABSTRACT

This study revealed that non-purchasers perceived a higher risk than online purchasers, in terms of performance, security, financial, psychological and time risks. Regarding risk reduction strategies, shopping around over the web was more important to online purchasers than non-purchasers. In addition, reputation of web vendor, well-known brand, symbol of security approval and recommendation of family and friends were perceived as preferred risk reduction strategies in online air-ticket purchases. Furthermore, respondents perceived risks differently according to their demographic characteristics.

Key Words: online marketing, air-ticket purchase, perceived risk, risk reduction

INTRODUCTION

The concept of perceived risk has generally been identified as the unanticipated and uncertain consequences, which are likely to be unpleasant (Bauer, 1960). Mitchell and Boustani (1993) explain that purchasers perceive less risk than non-purchasers since purchasers have more experience. When consumers perceive risk in the decision making processes, they try to reduce the uncertainty or negative consequences of their decisions by using risk reduction strategies (Mitchell, Davies, Moutinho, & Vassos, 1999). Understanding and applying for the risk reduction strategies used by consumers in purchasing products/services would be valuable for marketers to encourage and promote online shopping to their targeted consumers (Tan, 1999).

The purpose of this study is to explore the perceived risk and risk reduction strategies in online air-ticket purchases. This study attempts to investigate 1) whether there are any differences in the degree of perceived risk between online purchasers and non-purchasers; 2) whether there are any relationship between perceived risk and online shoppers' demographic characteristics, and 3) whether there are any differences in the perceived importance of risk reduction strategies between online purchasers and non-purchasers.

LITERATURE REVIEW

Perceived Risk

The concept of perceived risk explains that consumers' purchasing behavior involves risk in the sense that the consumer will face with unanticipated and uncertain consequences, some of which are prone to be unpleasant (Bauer, 1960). An important characteristic of perceived risk is that it originates only from potentially negative outcomes. Another important characteristic of perceived risk is uncertainty. Uncertainty can be defined as the consumers' subjective possibility of outcomes that derived from purchase decisions (Cox & Rich, 1964).

Types of Perceived Risk

Traditionally, six types of risk have been identified in overall risk concept: financial, performance, psychological, social, physical and time risks (Jacoby & Kaplan, 1972; Roselius, 1971). In addition to those traditionally accepted six types of risk, one fast growing risk issue in online shopping is security risk (Harrison-Walker, 2002).

Online Shopping Experience

Shopping experience is considered as one of the significant attributes in understanding consumer behavior (Harrison-Walker, 2002; Jarvenpaa & Todd, 1997). As consumers have experienced a certain product/service over time,

they become more certain of the performance of product/service and, consequently, perceived risk can be reduced (Mitchell and Prince, 1993; Fenech and O'Cass, 2001). Therefore, the hypothesis one is as follows:

- H1. The degree of perceived risk is significantly different between online air-ticket purchasers and non-purchasers.

The demographics such as gender, age, and income have been adopted as a reasonable segmentation tool and a predictor of useful explanations of consumer behavior. Many researches have shown interests in demographics of the Internet users to facilitate online marketing practice (Weber & Roehl, 1999; Donthu & Garcia, 1999; Pitkow & Kehoe, 1996; Fram & Grady, 1995; Kim & Kim, 2004).

- H2. The degree of perceived risk in online purchasing is significantly different among different consumers' demographic characteristics (gender, marital status, position, age, income, and Internet usage).

Risk Reduction Strategies

Mitchell et al. (1999) identify risk reduction as a process that consumers use to try to decrease the uncertainty or consequences of an unsatisfactory decision. The eight items used as risk reduction strategies in this study were shopping around over the web, reputation of web vendor, recommendation of family and friends, well-known brand, special offers, cheapest brand, reading product information, and symbol of security approval. Mitchell and Boustani (1993) explain that the importance of risk reduction strategies does not vary between purchasers and non-purchasers. However, if they are varied, it would be a valuable information to help online marketers in developing risk reduction strategies for each group (Mitchell & Boustani, 1993). Thus, the hypothesis three is as follows:

- H3. The importance of risk reduction strategies is perceived significantly different between online air-ticket purchasers and non-purchasers.

METHODS

A questionnaire survey was conducted in this study. The items of the questionnaire were developed based on the multi-item scales used by Stone and Gronhaug (1993), Pope et al. (1999) and Salisbury et al. (2001). In addition, the items comprising risk reduction strategies were included based on the studies by Mitchell and Grotorex (1993) and Mitchell and Boustani (1994). To measure perceived risk, six-point rating scale was utilized ranging from 1 (strongly disagree) to 6 (strongly agree). The level of importance of risk reduction strategies were measured by using seven-point rating scale ranging from 1 (not very important) to 7 (very important). A pretest was conducted. The target population of the study was college students, faculty, staff and administrators. First, a convenience sampling was employed to choose seven universities. Then, an email search function was utilized at each selected university's web site to randomly draw the samples. A total of 4,326 samples were randomly selected from the target population to participate in this study. Finally, a total of 310 responses (7.9% response rate) were used for further analysis.

RESULTS

The principle component factor analysis with varimax rotation revealed a seven-factor solution with the clear loadings to the online air-ticket purchases. All factor loadings were higher than .67 and more than 84% of the variations were accounted from the original 24 items. The Cronbach's alpha scores ranged from .873 to .945, which indicated that seven perceived risk dimensions were reliable.

Table 1
The Dimensions of the Perceived Online Purchasing Risk

Factor	Factor Loading	Eigen Value
Factor 1. Performance risk (.945) ^a		3.649
I am not confident about the ability of an online airline vendor to perform as expected.	.891	(15.202) ^b
As I consider the purchase of air-tickets over the Web, I worry about whether they will perform as they are supposed to.	.876	
If I were to purchase air-tickets over the Web, I would be concerned that they would not provide the level of benefits that I would be expecting.	.779	
Considering the possible problems associated with an online air-tickets vendor's performance, a lot of risk would be involved with purchasing them over the Web.	.750	

Factor 2. Security risk (.912)		3.391
I would feel insecure sending sensitive information over the Web.	.881	(14.131)
If you purchase air-tickets over the Web, your credit card details are likely to be stolen.	.869	
Overall, the Web is an unsafe place to transmit sensitive information.	.852	
The web is an insecure means through which to send sensitive information.	.804	
Factor 3. Financial risk (.898)		2.995
If I bought air-tickets over the Web, I would be concerned that the financial investment I would make would not be wise.	.813	(12.479)
Purchasing air-tickets over the Web would not provide value for the money I spent.	.748	
Purchasing air-tickets over the Web would be an inappropriate way to spend my money.	.713	
If I bought air-tickets over the Web, I would be concerned that I really would not get my money's worth from the tickets.	.672	
Factor 4. Social risk (.873)		2.841
Purchasing air-tickets over the Web would cause me to think of it as foolish by some people whose opinion I value.	.833	(11.838)
Purchasing air-tickets over the Web will adversely affect others' opinion of me.	.818	
The thought of buying air-tickets over the Web causes me concern because some friends would think I was just being showy.	.800	
Factor 5. Physical risk (.916)		2.708
I am concerned that using the Web may lead to uncomfortable physical side effects such as bad sleeping, backaches, and the like.	.897	(11.285)
I am concerned about the potential health-related risks associated with purchasing air-tickets over the Web.	.831	
One concern I have about purchasing air-tickets over the Web is that eyestrain could result due from looking at the computer.	.802	
Factor 6. Psychological risk (.935)		2.623
The thought of purchasing air-tickets over the Web gives me a feeling of unwanted anxiety.	.882	(10.927)
The thought of purchasing air-tickets over the Web makes me feel psychologically uncomfortable.	.862	
The thought of purchasing air-tickets over the Web causes me to experience unnecessary tension.	.812	
Factor 7. Time risk (.882)		2.127
Purchasing air-tickets over the Web will take too much time or be a waste of time.	.779	(8.864)
Purchasing air-tickets over the Web could lead to an inefficient use of my time.	.735	
The demands on my schedule are such that purchasing air-tickets over the Web could create even more time pressures on me that I don't need.	.684	
Total variance explained %		84.727

^a Reliability score (Cronbach's alpha), ^b Variance explained %

The results of independent sample t-test showed that, except factor 4 social risk and factor 5 physical risk, non-purchasers perceived higher risk on financial, performance, psychological, and security risks than online purchasers in online air-ticket purchases ($p \leq .05$). Therefore, hypothesis one is failed to reject.

An ANOVA was applied to examine whether there were significant relationships between respondents' risk perceptions and demographic characteristics (hypothesis two). Table 2 shows the results of ANOVA.

Table 2
Respondents Demographic Profiles and Perceived Online Purchasing Risk

Demographics	F1 (PERF)	F2 (SEC)	F3 (FIN)	F4 (SOC)	F5 (PHY)	F6 (PSY)	F7 (TIM)	OVER- ALL
Gender								
Male	2.22	2.59	1.70	1.37	1.36	1.39	1.57	1.81
Female	2.64	2.99	1.72	1.37	1.50	1.68	1.60	2.21
t-value	-2.842**	-2.767**	-.178	-.074	-1.482	-2.653**	-.269	-3.059**
Marital Status								
Single	2.51	2.74	1.76	1.36	1.35	1.49	1.55	1.99
Married	2.17	2.89	1.55	1.37	1.61	1.62	1.67	2.01
t-value	2.109*	-.903	1.894	-.110	-2.058*	-1.059	-1.063	-.109
Position								
Students	2.54	2.82	1.79	1.44	1.49	1.55	1.62	2.03

Others ^a	2.09	2.80	1.46	1.11	1.21	1.54	1.51	2.01
t-value	2.337*	.094	2.623*	4.809**	2.933**	0.032	0.867	0.125
Age								
18-30	2.56	2.78	1.80	1.43	1.50	1.55	1.60	2.02
31 years or above	2.14	2.83	1.46	1.16	1.22	1.49	1.52	1.99
t-value	2.436*	-.320	2.934**	3.532**	3.293**	.503	.684	.156
Income								
\$9,999 or under (A)	2.56	2.82	1.81	1.42	1.55	1.59	1.65	2.10
\$10,000 - \$49,999 (B)	2.42	2.79	1.70	1.28	1.34	1.52	1.50	2.00
\$50,000 or above (C)	1.60	2.58	1.22	1.31	1.17	1.21	1.58	1.44
F-value	7.531**	.461	4.785**	1.246	3.254*	1.917	.961	3.985*
Tukey's test	A,B > C		A,B > C		A > C		A,B > C	
Internet usage								
5 years or under (A)	2.74	2.98	2.03	1.50	1.54	1.77	1.67	2.21
6-7 years (B)	2.51	2.75	1.74	1.49	1.42	1.45	1.62	2.03
8 years or above (C)	2.24	2.63	1.50	1.28	1.44	1.43	1.56	1.80
F-value	3.711*	1.814	7.482**	2.445	.356	3.410*	.312	3.552*
Tukey's test	A > C		A > C		A > C		A > C	

^a Others: faculty, staffs, administrators and other, *p≤.05, **p≤.01

The results showed that there was a significant difference in the importance of shopping around over the web as a risk reduction strategy between online air-tickets purchasers and non-purchasers (hypothesis three). It could be concluded that hypothesis three is rejected except for risk reduction strategy of shopping around over the web. "Reputation of web vendor" was perceived the most important risk reduction strategy to online air-tickets purchasers. On the other hand, "well-known brand" was perceived the most important risk reduction strategy to non-purchasers. In addition, the important risk reduction strategies ranking on "reputation of web vendor", "well-known air brand", "symbol of security approval", and "recommendation of family and friends" were similar for both online purchasers and non-purchasers (Table 3).

Table 3
The Rankings of the Importance of Risk Reduction Strategies

Risk reduction strategies	Online purchasers		Non-purchasers		t-value
	Mean	Rank	Mean	Rank	
Reputation of web vendor	5.92 (1.24) ^a	1	5.83 (1.54)	2	.61
Well-known brand	5.69 (1.34)	2	5.90 (1.40)	1	-1.28
Symbol of security approval	5.45 (1.49)	3	5.70 (1.47)	3	-1.40
Recommendation of family and friends	5.28 (1.40)	4	5.48 (1.50)	4	-1.21
Shopping around over the web	5.23 (1.68)	5	4.76 (1.77)	7	2.34*
Special offers	5.18 (1.54)	6	4.88 (1.74)	6	1.52
Reading product information	4.93 (1.70)	7	5.07 (1.66)	5	-.70
Cheapest brand	4.72 (1.67)	8	4.34 (1.78)	8	1.89

^a Standard deviation, *p≤.05

CONCLUSION

The results of this study generally supported the idea that non-purchasers perceive higher risk than online purchasers in online air-ticket purchases. Non-purchasers perceived higher risk on performance, security, financial, psychological and time. In specific, for non-purchasers, the uncertainty in performance of service for its variation over time would result in increasing perceived risk (Mitchell & Groatorex, 1993). In addition, non-purchasers perceived higher risk in transmitting information via online transaction. Lack of experience in online transaction for purchasing air-tickets made non-purchasers feel more risk than online purchasers. The results of the study provided some useful information to understand relationship between perceived risk and online shoppers' demographic characteristics. For example, females perceived higher risk on performance, security, psychological and overall risks than males. Overall, females were more concerned about unanticipated or uncertain consequences than males. Online marketers should be aware that females perceive higher risk than males.

This study indicated that shopping around over the web was a more important risk reduction strategy to online purchasers than non-purchasers. Online marketers should provide best quality at low prices to reduce uncertainty perceived by online purchasers (Sirgy & Su, 2000). On the other hand, reputation of web vendor, well-known brand, symbol of

security approval and recommendation of family and friends were considered as important risk reduction strategies for both online purchasers and non-purchasers. Reputation of web vendors was rated as the most important risk reduction strategy by the respondents. The good reputation of a web vendor reduced perceived risk in air-ticket purchases. This finding supports the claim that good reputation helps reduce uncertainty in purchase decisions (Grabner-Kraeuter, 2002). The results of this study supported that well-known brand was a preferred risk reduction strategy. Well-known brand name provides credence to the product/service and this credence eventually helps reduce perceived risk in purchase decisions (Srinivasan & Till, 2002). In addition, symbol of security was an important risk reduction strategy in online air-ticket purchases. As Fenech and O'Cass (2001) suggest, online marketers should ensure consumers that their web sites are highly secure in responding to growing concerns in online transaction security. In this perspective, using the symbol of security approval such as VeriSign and TRUSTe is an effective way to ensure the security of their web sites. Recommendation of family and friends was an important risk reduction strategy. In general, consumers are sensitive to the opinion of family and friends while purchasing services because of the difficulty involved in assessing service qualities. Online marketers should ask for positive word-of-mouth to customers and offer incentives for it. At the same time, they need to be aware of negative word-of-mouth. On the other hand, cheapest brand was ranked the least important risk reduction strategy by both online purchasers and non-purchasers. It would be beneficial to use risk reduction strategies along with other dimensions rather than solely based on price.

LIMITATIONS

The samples were drawn from seven universities' web sites, so that the majority of samples were students. Student samples are usually limited in finance (Mitchell & Grotorex, 1993), so that financial concerns might influence the results of the study. Therefore, a broader sampling population is needed in future research. In addition, although monetary incentives and follow-up e-mails were utilized to increase the response rate, the response rate was relatively low. The short attention span of approximately 15 seconds and the huge amount of junk mail that online users receive might be a reason for the low response rate (Kim, Nam, & Stimpert, 2004). Therefore, an effective way to obtain high response rate in online survey should be accompanied with the future research.

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ANTECEDENTS AND CONSEQUENCES OF CUSTOMER SATISFACTION IN RESTAURANT SERVICESCAPE

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ABSTRACT

This study is based on an empirical investigation of 207 respondents who had a purchase experience in a theme restaurant in Alberta, Canada. Servicescape is a manmade environment or physical surroundings in contrast to a natural or social environment. The study investigates the effect of theme restaurant servicescape on the perceived quality of the restaurant, and examines the mediational roles of restaurant customers' perceived quality and customer satisfaction on customer revisit intentions and desire to stay. The study assists restaurant managers in enhancing restaurant servicescape to achieve a continued high perceived quality, customer satisfaction, and revisit intention.

Key Words: customer satisfaction, servicescape, perceived quality, theme restaurant

INTRODUCTION

Following September 11, 2001, and the resulting weaker economy, restaurant managers face nearly insurmountable competition. There is a strong need for restaurant managers to plan, build, change, and control their service quality on a continual basis to remain competitive. Restaurant managers spend a large portion of their budget developing service quality so as to maintain a strong position in the restaurant market or achieve competitive advantage in that market. Services research to date has focused mainly on service encounters of relatively short duration (Bitner, 1990; Cronin and Taylor, 1992; Parasuraman et al., 1991). In any service encounter, the customer typically spends only a brief period of time inside the service facility. Customers primarily perceive service quality and the level of resulting satisfaction on the basis of intangible factors, such as reliability, responsiveness, assurance, and empathy (Parasuraman et al., 1988) and less on the more tangible aspects, such as the physical facilities of the service provider (i.e., the servicescape; Bitner, 1992).

Customer perception of the quality of restaurant service directly affects both customer satisfaction and revisit intention. Restaurant services, other than quick-service restaurants, generally require that customers spend extended periods of time in the physical surroundings of the facility (Turley and Fugate, 1992). Servicescape is a manmade environment or physical surroundings in contrast to a natural or social environment (Bitner, 1992). In such cases, it is more than the perceived quality of the service that determines the customer's service experience and the decision regarding how long they stay in the facility. Bitner (1992) has indicated that the facility itself, or the "servicescape," may have a substantial additional effect on customer satisfaction with the service experience. This additional customer service experience also plays an important role in determining whether the customer will choose to revisit the service provider. The research relating to the general service environment has been well developed, but little investigation has been conducted in the hospitality industry (Taylor et al., 1993). The purpose of this study is to investigate the effect of theme restaurant servicescape on the perceived quality of the restaurant and examine the mediational roles of restaurant customers' perceived quality and customer satisfaction on revisit intention and the length of stay in the establishment. Providing this further insight into the various elements of the restaurant servicescape this study can provide restaurant managers precise information/data on how to enhance the perceived quality of their facilities.

LITERATURE REVIEW

Bitner (1992) identifies three primary dimensions of servicescape that can influence customers' holistic perceptions of the servicescape and their subsequent internal and external responses to it. These three dimensions are (1) ambient conditions (2) spatial layout and functionality, and (3) signs, symbols and artifacts. From a facility planning and management standpoint, the second and third dimensions are more commonly referred to as "interior layout and design" (Brauer, 1992), or what Bitner (1992) succinctly labels as the "built environment." In this paper we focus on this "built environment" since it can be controlled to a large extent by management. Five servicescape factors that parallel the primary elements of interior layout and design suggested by Baker et al. (1994), Bitner (1992) and Brauer (1992) are layout accessibility, facility aesthetics, seating comfort, facility cleanliness, and electronic equipment and display.

Lucas (2003) examined the effects of the variables theorized to influence satisfaction ratings with the physical environment of a slot floor (slot servicescape) and the effect of the slot servicescape satisfaction on overall experience satisfaction and compared to the contributions of more traditional service-based satisfaction antecedents. Finally, the influence of overall slot player satisfaction on behavioral intentions was measured. Five scales of slot servicescape, representing ambient conditions, ability to navigate the slot floor, cleanliness, interior décor, and seating comfort, all have a significant effect on slot servicescape satisfaction. Scales representing slot servicescape satisfaction and gaming value produce significant effects on overall satisfaction with slot experiences. Overall satisfaction with the slot experience produces a significant effect on behavioral intention variables such as repatronage, word of mouth and desire to remain in the casino environment. These constructs then served as both independent and dependent variables in regression analyses conducted to determine the nature of the relationships between the variables.

Research Hypotheses

Six primary dimensions of servicescape that can influence customers' holistic perceptions of the servicescape and their subsequent internal and external responses to it identified based on the extensive previous studies. These six dimensions are Friendliness of Employees and Promptness of Service, Attractiveness, Layout and Design, Electronic Equipment, Seating Comfort, Ambient Conditions in the Physical Environment. Hence, the following hypotheses are suggested:

- H1: service promptness and staff friendliness (service) will have a positive effect on the perceived quality of a theme restaurant.
- H2: Attractiveness will have a positive effect on the perceived quality of the theme restaurant.
- H3: Layout and design will have a positive effect on the perceived quality of the theme restaurant.
- H4: Electronic equipment will have a positive effect on the perceived quality of a theme restaurant.
- H5: Seating comfort will produce a positive effect on perceived quality of a theme restaurant.
- H6: Ambient conditions will have a positive effect on perceived quality of a theme restaurant.
- H7: The perceived quality of the servicescape will have a positive effect on customers' overall satisfaction with the servicescape.
- H8: Customers' overall satisfaction with the servicescape will have a positive effect on the length of time they desire to stay in the servicescape.
- H9: Customers' overall satisfaction with the servicescape will have a positive effect on their revisit intentions.

Model Development

Based on the research presented in the literature review, a servicescape in a theme restaurant model is developed. The model postulates the relationship between six components of servicescape in a theme restaurant and the consequences of the servicescape. Theme restaurant servicescape can be explained in terms of service, attractiveness, layout and design, electric equipment, seat and ambience. Consequences of these servicescape experiences are expressed in terms of perceived quality of the overall theme restaurant servicescape, overall satisfaction of theme restaurant servicescape and behavioral intentions. Within a consequence variable, overall satisfaction of theme restaurant is an antecedent of a customer's intention to revisit and desire to stay.

RESEARCH METHODOLOGY

Sampling and Data Collection

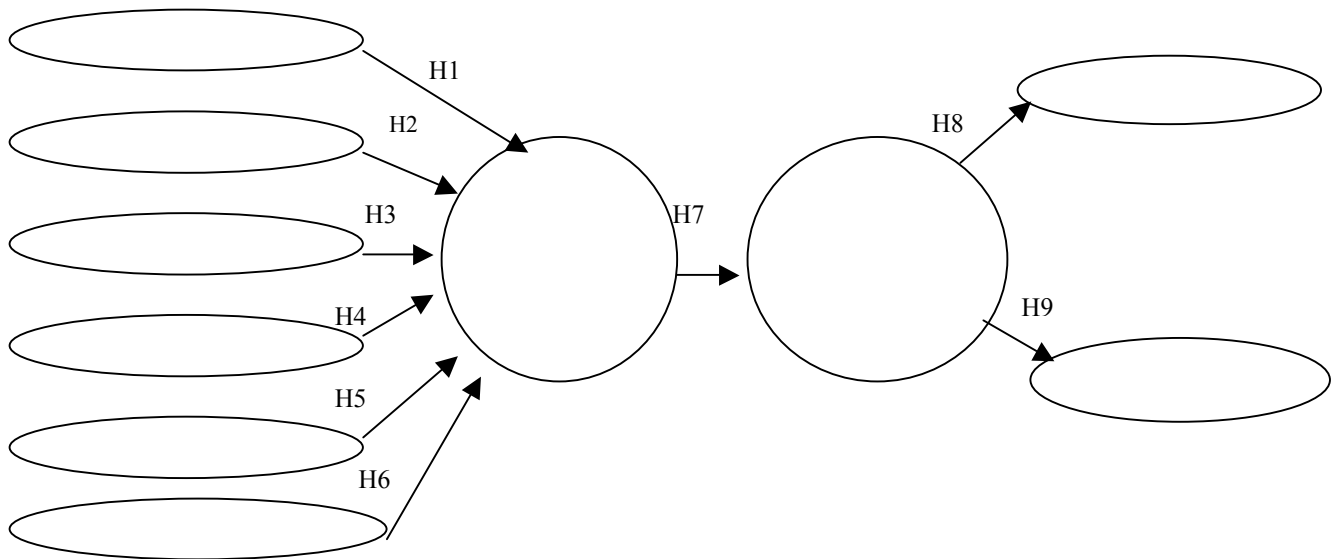
The research hypotheses were tested with data collected via surveys conducted in the Banff center in Alberta, Canada, during the month of October 2004. Although the sample was not randomly selected, steps were taken to make the selection process of subjects as random as possible. Two internship students majoring in hospitality management working in Banff were trained and hired as data collectors. Respondents were approached for every fourth visitor to the help desk of two service staffs at the Banff center. A screening question as to whether a visitor had visited a theme restaurant for the past six months was asked and only those who met the criteria were selected as respondents. Respondents were not offered incentives for completing the survey. Visitors who agreed to participate in the survey were given a self-administered questionnaire. Respondents were asked to complete the survey and return it directly to the two service staffs at the center. Two hundred twenty completed surveys were returned to researchers and 207 surveys were used for final analysis.

The measurements were taken or adapted from previous marketing and hospitality research. The design of the questionnaire was based on multiple-item measurement scales that had been validated in previous studies. A multi-item approach was chosen to measure all constructs. Fifty-three measures were used to capture the various latent constructs. The items in all scales were measured on a 7-point, Likert-type scale anchored from 1 (strongly disagree) to 7 (strongly agree). Based on the review of the literature, 43 items were developed to measure the 6 elements of servicescape and categorized 4 kinds of theme in theme restaurants: Regional & Era's, Symbolic, Entertainment, other type of theme. For example, Bistro,

Joe's American Bar & Grill, can be Regional & Era's theme restaurants; Mickey Male's Restaurant, King Crab Lounge, Monte's-men's Club and Disneyland Character Dinner can be samples of the Symbolic theme restaurant; and Wizards Magic, Hard Rock Café, Planet Hollywood, Jekyll and Hyde Club, Rainforest Café can be samples of an Entertainment theme restaurant.

MESUREMENT

Figure 1
Model Development



RESULTS

Demographic Profile of Respondents

Respondents consisted of 52.4 % male and 47.6% female. 35.1% of respondents experienced Regional & Era's theme, 16.8% of respondents experienced Symbolic theme, 33.2% of respondents experienced an Entertainment theme and 14.4 % of respondents experienced other kinds of theme other than the three prior themes. Other kinds of theme cannot be defined as part of the suggested three themes because of the unfamiliarity of the restaurant name. 31.8% of respondents were between the ages of 15 and 24, 43.3% were between the ages of 25 and 34 years old, 15.9% were between the ages of 35 and 44 years old, 5.3% were between the ages of 45 and 54, 9.1% were 55 or above. 48.6% of respondents visited a theme restaurant 1-4 times per year, 35.6% visited theme restaurants 5-10 times per year, and the other 15.9% visited a theme restaurant 11 times or more per year. 3.8% of respondents spent under \$10 per person in theme restaurant, 42.8% spent \$10.01 - \$20.00, 31.3% spent \$20.01 - \$30.00, 12.0% spent \$30.01-\$40.00, and 10.1% spent \$40.01 or above.

Factor Analysis

Prior to using the structure equation model, the 43 determinants were factor analyzed using principal component analysis with orthogonal varimax rotation in order to identify the structure of determinants toward the servicescape of theme restaurants. Table 1 presents results relevant to the question of which determinants were important to explain the total variances in all the variables. The number of factors was determined by retaining only the factors with eigenvalue of 1 or higher. The first factor 'service' included 7 items associated with friendliness of employees and promptness of service: polite and courteous (X37), displayed personal warmth in their behavior (X38), happy to serve the customers (X39), never look like they were bothered by a customer request (X40), neat in appearance (X41), responded to customer request quickly (X42) and gave prompt service (X43). The second factor 'attractiveness (attract)' included 8 items: attractive character of restaurant's architecture (X5), decorated in an attractive fashion (X6), attractive restaurant itself (X7), the use of attractive color (X8), added excitement with bright, colorful and electric signs (X9), attractive wall treatment (X10), attractive floor treatment (X11), attractive interior décor (X12). The third factor 'layout & design (layout)' included 6 items: attractive

employee uniform (X13), sign that provided adequate direction (X17), easy design to access (X18), appropriate number of tables (X19), easy to get to customer's seat (X21), easy to get to the restroom (X22). The fourth factor 'electric equipment (elect)' included 4 items: audio /video machine itself (X24), audio /video machine which added excitement to the place (X25), audio /video machine which was entertaining to watch (X26), high quality audio/video machines (X27). The fifth factor 'seat' included 4 items: Comfortable distances from the table (X28), seats comfort (X29), easy to get in and out of seats (X30), plenty of space between seats (X31). The sixth factor 'Ambient conditions of the physical environment (ambient)' included 3 items: appropriate lighting level (X1), comfortable temperature (X2), good feeling and aroma (X3).

Table 1
The Result of Confirmatory Factor Analysis and Measurement Scale Characteristics

Factor	Eigenvalue (VE%)	Cronbach's Alpha()	CCR ^b	AVE
1. service(X37-X43)	43.8	0.94	0.94	0.70
2. Attract (attractiveness, X5-X12)	9.32	1.00	0.91	0.56
3. Electric (electric equipment, X24-X27)	4.92	1.00	0.91	0.71
4. Layout (Layout & Design, X13, X7-X19, X21, X22)	6.15	0.86	0.85	0.60
5. Seat(X28-X31)	3.52	0.89	0.89	0.68
6. Ambience(X1-X3)	3.27	0.77	0.77	0.63
7. Perqual (Perqual 1-3)	6.39	0.90	0.90	0.75
8. Satisfaction(Satis 1, 2)	71.54	0.88	0.88	0.78
9. Desire to stay(Destay 1, 2)	5.47	0.86	0.86	0.75
10. Intention to revisit (Revisit 1-3)	3.58	0.89	0.89	0.73

^a $\chi^2 = 1233.77$, $df = 774$, $p < .001$, $GFI = 0.90$, $CFI = 0.98$, $NFI = 0.97$, $RMSEA = 0.059$ CCR^b: Composite reliability AVE: Average variance extracted

Measurement Model

The overall measurement quality was assessed using confirmatory analysis (Gerbing and Anderson, 1988). Although measurement quality is sometimes assessed factor by factor, each multiple-item indicator was considered simultaneously to provide the fullest convergent and discriminant validity. Initial analyses suggested that 12 items with low factor loadings (below .50) be dropped from further analysis (see Table 1). All loading exceeded 0.5, and each indicator t-value exceeded 7.0 ($p < .001$). The χ^2 fit statistics was 1233.7 with 774 degrees of freedom ($p < .001$). The root mean squared error of approximation (RMSEA) was 0.059, the comparative fit index (CFI) was 0.98, the goodness-of-fit index (GFI) was 0.90, and the normed fit index (NFI) was 0.97. All statistics supported the overall measurement quality, given a large sample and number of indicators (Anderson and Gerbing, 1988).

Structural Model Results

Using the Lisrel 8.5 version, structure equation methodology was used to test the hypothesized model. The hypothesized relationships in the model were tested simultaneously by using structural equation modeling. The resulting χ^2 is 1313.16 with 795 degrees of freedom ($p = 0.000$; $GFI = 0.90$; $RMSEA = 0.055$; $NFI = 0.97$; $CFI = 0.99$), suggesting that the hypothesized model fits the data. The set of hypotheses (H1-H6) addressed the servicescape of a theme restaurant. The hypotheses H1 (service), H3 (layout and design), H4 (electric equipment), H6 (ambient) had a positive impact on perceived quality of theme restaurant servicescape. However, the hypotheses H2 (attractiveness), H5 (seat) had a positive and insignificant effect on the perceived quality of theme restaurant servicescape. H7-H9 addresses the relationship among the perceived quality of theme restaurant, overall satisfaction of a theme restaurant, and desire to stay or intention to revisit. H7, H8, and H9 suggest the perceived quality of a theme restaurant servicescape has a positive relationship with overall satisfaction of theme restaurant servicescape; and the satisfaction of theme restaurant servicescape also has a positive relationship to the desire to stay or intention to revisit by path estimates.

CONCLUSION AND IMPLICATIONS

The purpose of this study was to investigate the effect of theme restaurant servicescape on the perceived quality of the restaurant and to examine the mediational roles of restaurant customers' perceived quality and customer satisfaction on revisit intention and desire to stay. This study illustrates that the servicescape of theme restaurants has a relatively consistent and strong effect on the length of time customers desire to stay in a theme restaurant and on their revisit intentions. These findings provide that the servicescape is an important determinant of customers' behavioral intentions when service is consumed primarily for hedonic purposes and customers spend moderate to long periods of time in the servicescape.

Table 2
Structural Model Results

Hypothesized relationship	Proposed model		
	Standardized path coefficient	t-value	Results
H1 Service _ Perceived quality(_ 11)	0.13	2.46	Supported
H2 Attractiveness _ Perceived quality (_ 12)	0.08	1.52	Not Supported
H3 Layout & design _ Perceived quality(_ 13)	0.57	9.44	Supported
H4 Electric equipment _ Perceived quality(_ 14)	0.10	2.32	Supported
H5 Seat _ Perceived quality(_ 15)	0.01	0.24	Not Supported
H6 Ambient _ Perceived quality(_ 16)	0.12	2.47	Supported
H7 Perceived quality _ Overall satisfaction(_ 31)	0.78	17.86	Supported
H8 overall satisfaction _ Desire to stay(_ 23)	0.79	18.16	Supported
H9 Overall satisfaction _ Intention to revisit(_ 34)	0.76	16.69	Supported

^a _2 =1313.16 795 degree of freedom (p<.001), GFI= 0.90, CFI= 0.99, NFI= 0.97, RMSEA= 0.055

Friendliness of employees and service promptness were important as the same as other service facilities. Providing good intangible service is an important precursor for maintaining the interest in a theme restaurant. The challenge for many theme restaurant managers is to think of layout and design or maintenance of the existing layout and design as an investment with positive associated return, and not as a sunk cost. Even small-scale layout and design improvements may prove sufficient for maintaining the interest of the theme restaurant customer. Seating in theme restaurants varies in terms of seat covering, space between table and chair, comfort, ease of movement. This variety is related to seat display and design, and it also can be a part of layout and design. Grayston (1974) makes the point that the ideal ambient conditions of an environment vary across setting, task, and individual. This point is of particular importance to theme restaurants. These results also supported Bitner's (1992) general notion that the ambient conditions of an environment are an important component of a customer's holistic evaluation of that environment. Further, Bitner notes the exaggerated importance of ambient conditions when the customer is exposed to the environment for an extended period of time.

A key theoretical implication of this study is that service quality research, especially in the case of a theme restaurant, should not only look at intangible factors (e.g. reliability, responsiveness, empathy and assurances), but should also more thoroughly investigate the tangible aspects of the service; namely, the servicescape. Future research may investigate and compare the effects of both the servicescape and SERVQUAL regarding overall satisfaction and customers' behavioral intentions within a variety of utilitarian and hedonic service places. Frequency of visitation may be an interesting moderating variable to see how the effect of both servicescape and SERVQUAL on customer satisfaction and purchase behavior may vary, depending on the frequency. From a practical standpoint, this information can help restaurant operators estimate the impact of investments designed to improve the service quality process versus those investments designed to improve the service facility.

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UNDERSTANDING THE EFFECTS OF JOINT-PROMOTION ON CUSTOMER SATISFACTION AND RESTAURANT BRAND LOYALTY

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ABSTRACT

Joint-promotion can be a win-win strategy to help drive sales, develop brand images, and save marketing or advertising cost in the restaurant industry. Despite the increasing attention in joint-promotion, the relationship between joint-promotion, consumer satisfaction, and brand loyalty remains largely unexplored. Therefore, this study aims to examine the impact of joint promotion on customer satisfaction, which in turn leads to brand loyalty in restaurants in Korea. The result indicates that some types of joint-promotion (i.e., price benefits and post-purchase services) can be an effective marketing strategy that allows restaurants to construct customer satisfaction or brand loyalty.

Key words: Joint-promotion, customer satisfaction, brand loyalty, structural equation modeling (SEM)

INTRODUCTION

The chain restaurant has become a typical form of global business that interconnects diverse cultures and nations. In recent years, the chain restaurant industry has grown dramatically, and numerous foreign chain restaurants have been established in Korea. Namely, TGI Friday's arrived in 1991, Ponderosa in 1992, Sizzler in 1993, Popeyes in 1994, Tony Roma's in 1995, Bennigan's in 1995, Planet Hollywood in 1995, Chili's in 1996, Hard Rock Cafe in 1996, Outback Steakhouse in 1997, and Starbucks in 1999 (Kim and Chon, 2003). A rapidly increasing number of chain restaurants has certainly brought severe competition among the restaurants in terms of unique menus, interior design development, and customer-service differentiation. In 2004, the restaurant industry confronted much more intense competition because of food materials' crisis such as bird influenza and meat crisis. The crisis has induced the mistrust of eating-out and consumption contraction. In addition, some adverse economic situations such as the huge growth of family debt and the number of bad credit personals also brought serious challenges to the restaurant industry. Under these bad circumstances, the restaurant operators are trying to work out brand differentiation strategies for keeping the preceding level of market share to continue to exist (Kim, Han, and Lee, 2001). For this reason, it has become an urgent issue for them to implement effective marketing and promotional tools.

Joint-promotion is increasingly becoming a trendy technique to sell both service and products and has been mainly used by the chain restaurant industry in Korea (Jung, 1998). In general, joint-promotion means that more than two companies co-involve in marketing/advertising and share risks, while maintaining their independence as separate business entities (Hahm and Khan, 2001). It can be a win-win strategy to help drive sales, develop brand images, and save marketing or advertising cost in the chain restaurant industry. This is why more and more chain restaurants are venturing into joint-promotion. Despite the increasing attention in joint-promotion, the relationship between joint-promotion, consumer satisfaction, and brand loyalty remains largely unexplored. Therefore, this study aims to examine the impact of joint promotion on customer satisfaction, which in turn leads to brand loyalty in restaurants in Korea.

LITERATURE REVIEW

Joint-promotion of chain restaurants in Korea

In recent years, a chain restaurant industry has started to utilize numerous marketing techniques to attract new customers as well as to maintain the existing loyal customers (Jung, 1998). Although simply issuing membership cards or coupons was considered as an effective marketing strategy until recently, the rapidly changing market conditions (e.g., a decreased customer base and increasing competition within the industry) in Korea started to challenge the effectiveness of such conventional marketing tools (Kim, Han, and Lee, 2001). In response to this, joint-promotion has emerged as an

alternative marketing strategy. Joint-promotion can be defined as more than two parties working together in advertising/marketing while maintaining their independence as separate companies (Hahm, 2001). The chain restaurants in cooperation with big companies (e.g., mobile communication, credit-card companies, department stores, and rival chain restaurants), in many cases, are in an advantageous position to increase a market share by providing multiple benefits such as price benefits, souvenirs, and post-purchase services to their customers. A price benefit is one of the most popular strategies in joint-promotion among Korean chain restaurants. The chain restaurants often provide a discount price for their visitors through a joint-promotion. Other representative types of joint-promotion include souvenirs offering (e.g., gifts, catalogues, and samples) and post-purchase services (e.g., mileage accumulation and electronic newsletters). The joint-promotion strategy among chain restaurants is a type of strategic alliance that aims to develop joint advertising or event programs by exchanging their own techniques and know-how with each other. It often produces various synergistic effects such as improving mutual brand images and sales, which could lead to a win-win situation.

Customer satisfaction

One of the major tasks that confront food-service managers is related to customer satisfaction in one way or another (e.g., maintenance, enhancement, and evaluation). Customer satisfaction often serves as an indicator that reflects customers' revisit intentions to a given restaurant. The term "customer satisfaction" has been conceptualized in various ways along the different contextual situations. The most widely accepted definition is cognitive and emotional responses by the consumer to the most recent transactional experience with a party (Oliver, 1993). As implied in this definition, the customer satisfaction indicates one's subjective evaluation of the provided products/services.

How can we effectively measure customer satisfaction? It has been measured in many ways. Since the 1970s, the most widely used measurement method may be the expectation-disconfirmation method. According to this perspective, customer satisfaction is the degree to which perceived performance of service/products matches a customer's expectations. If the customer's expectations of service/products' quality and price are exceeded, they are likely to be satisfied with the restaurants. Conversely, if the perceived performance does not exceed the expectation about the restaurant, then, dissatisfaction is likely to occur. In most cases, the level of satisfaction is positively associated with the degree of repeat visits. As evidenced by many literatures (Ellinger, Daugherty, and Plair, 1999; Kim, Park, and Jeong, 2004; Newman, and Werbel, 1973), the level of customer satisfaction acts as a strong determinant of behavioral aspect of customer loyalty. Besides, one of the major measurement methods is equity view. This theory considers the ratio of the consumer's outcome/input to the ratio of the provider's outcome/input (Oliver and DeSarbo, 1988). Equity refers to estimation of what is "fair" or "justice" for the perceived cost (e.g., monetary payments, time consumption, and stress experienced by consumers) of the providing (Bolton and Lemon, 1999). Customers are likeable to an equitably treated experience if they believe the ratio of their outcome to inputs is equivalent to the ratio of outcome to inputs felt by the restaurant. From this perspective, customer satisfaction results from an estimation of the sacrifices and rewards received by restaurants to an exchange. In recent years, considerable attention has been focused on customer satisfaction in food-service industries since an examination of the factors of customer satisfaction can offer clues concerning actions restaurant managers must take to grow the chances that customers will repeat visit. However, service quality issues have been stated about the excessive emphasis on customer satisfaction and whether or not it connects to their performance (Lam & Zhang, 1999; Su, 2004). Few researchers have examined the linkage between joint-promotion and customer satisfaction as one of the effective marketing strategies.

Brand loyalty

The maintenance and enhancement of brand loyalty stands for a fundamental marketing method for attaining advantage under high market pressure (Reichheld, 1996). The previous idea of loyalty focused on repeat purchase behavior (Brown, 1952). However, a significant difference was noticed between loyal customers and frequent visitors (Jacoby, Chestnut and Fisher, 1978; Day, 1969). Accordingly, "true" loyalty has been defined as a long-term commitment to repeat purchase involving both repeated patronage and an emotional attachment (Dick and Basu, 1994). A simplistic behavioral approach is not an adequate measure of loyalty, even though there may be a high level of correlation between repeat purchase behavior and "true" loyalty. Spurious/artificial loyal customers can make frequent purchases even when the customers are not emotionally or psychologically involved with the companies because there are a number of conditional barriers (e.g., accessibility of the service/product and diversity-seeking manners) that may affect repeated purchases. For this reason, several researchers have suggested that both behavioral (e.g., repeat patronage and word-of-mouth recommendations) and attitudinal (e.g., trust, emotional attachment or commitment, and switching cost) aspects should be taken into consideration to measure "true" loyalty concept (Tidewell and Fredline, 2004; Baloglu, 2002; Mattila, 2001; Shoemaker and Lewis, 1999; Dick and Basu, 1994). Brand loyalty has emerged as a significant marketing concept for many consumer driven businesses. It is likely that customers with a high level of loyalty spend more money on the products/services that provide a simpler decision-making process than others. Also, it has been known that the level of loyalty is closely related to several purchase behaviors such as sensitivity to price, positive word-of-mouth publicity, and

increased tolerance to the quality of products/services. For such reasons, loyal customers are often considered as a crucial component that ensures the prosperity of many businesses.

Research Hypotheses

Based on the extensive previous studies and interviews with industry professionals, customers' perceived benefits on the chain restaurants' joint-promotion strategies can be classified into three different categories (i.e., price benefits, souvenirs, and post-purchase services). From this perspective, this study views the price benefits, souvenirs, and post-purchase services as the three main benefits of chain restaurants' joint-promotion efforts. This study also postulates that three types of perceived benefits offered by joint promotion efforts are positively related to customer satisfaction and brand loyalty. Hence, the following hypotheses are suggested:

H1a: *Price benefits are positively related to customer satisfaction.*

H1b: *Price benefits are positively related to brand loyalty.*

H2a: *Souvenirs are positively related to customer satisfaction.*

H2b: *Souvenirs are positively related to brand loyalty.*

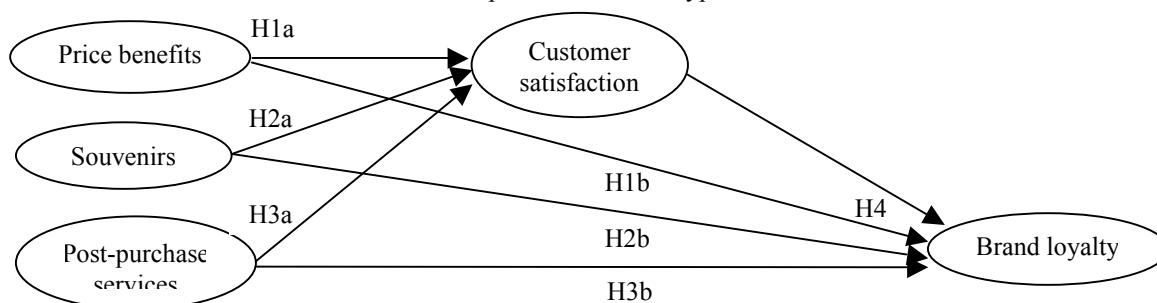
H3a: *Post-purchase services are positively related to customer satisfaction.*

H3b: *Post-purchase services are positively related to brand loyalty.*

H4 : *Customer satisfaction is positively related to customers' brand loyalty.*

The conceptual model for this study is shown in Figure 1. Given that the impact of three types of perceived benefits (i.e., price, souvenirs, and post-purchase services) on brand loyalty can be mediated by customer satisfaction, this study posits customer satisfaction partially mediates the relationship between three types of perceived benefits offered by joint promotion efforts and brand loyalty.

Figure 1
Conceptual model with hypotheses



METHODS

The convenience sampling method was used to select customers of chain restaurants in this study. A self-administered questionnaire was distributed to 131 customers at chain restaurants. The questionnaire consisted of a total of 22 questions. The questionnaire composed of four subsections: 1) joint-promotion, 2) customer satisfaction, 3) brand loyalty, and 4) demographic characteristics. The first part (9 questions) was employed to measure types of joint-promotion in chain restaurants and was measured by asking customers about nine advantages obtained from joint-promotion by five-point Likert scales, where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree. The second part (3 questions) was applied to measure the customers' satisfactory level when they visited chain restaurants during joint-promotion. The third part (5 questions) was used to examine the level of brand loyalty in chain restaurants. The survey instrument to measure brand loyalty was adapted from Mols (1998). Items in the scales were measured on a five-point, Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Finally, demographic characteristics (5 questions) were intended to analyze the profile of selected customers. Structural equation modeling (SEM) was used for hypotheses testing in this study. Following the two-stage approach suggested by Anderson and Gerbing (1988), the measurement model was first estimated using confirmatory factor analysis to test whether the constructs possess sufficient validation and reliability. The structural model that best fit the data was then demonstrated.

RESULTS

A profile of participants in this study is summarized. Females represented 64.3% of the sample and males 35.7%. The majority of respondents (83.6%) were single. The subjects' ages ranged from 19 years to 49 years. 25% of them were college students and the remaining group had various occupations including professional and non-professional. About 50% had a monthly income between US\$ 900 and US\$ 1,900. The educational levels were high- about 90% of subjects had two-

year college degrees or above. More than 50% indicated that they dine at the family restaurant more than twice per month. Most of them (96.9%) indicated that average spending is greater than US\$ 8 per person at each time of visit.

Table 1 reports means, standard deviations, and bivariate correlations for the constructs included in the theoretical model. As shown in Table 1, bivariate correlations ranged from $r = .10$ to $r = .45$, indicating no multicollinearity problems among the variables (Hair, Anderson, Tatham, and Black, 1992). The results of measurement model ($\chi^2 [67] = 104.27, p < .05$; CFI = .95, GFI = .90, NNFI = .93, RMSEA = .06) indicates that the confirmatory factor model fits the data well, and all loadings of the items exceed .5 and each indicator t -value exceeds 5.36 ($p < .001$). The findings indicate that the Cronbach's alpha exceed .6 for each scale. Additionally, the composite reliability (ρ_c) for each construct is acceptable, exceeding the minimum value of .6 (Diamantopoulos and Siguaw, 2000). The composite reliability indicates whether the individual indicators of each constructs provide reliable measurement of the construct.

Table 1
The results of correlation matrix

Variables	Mean	SD	(1)	(2)	(3)	(4)	(5)
(1) Price benefits	2.78	.91	-				
(2) Souvenirs	2.16	.78	.28**	-			
(3) Post-purchase services	3.57	1.01	.10	.16	-		
(4) Customer satisfaction	3.46	.75	.40**	.17	.34**	-	
(5) Brand loyalty	3.82	.63	.19**	.13	.39**	.45**	-

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

Table 2 presents standardized path coefficients resulting from testing the proposed structural model. The fit of structural model was good ($\chi^2 [66] = 92.63, p < .05$; CFI = .95, GFI = .91, NNFI = .94, RMSEA = .05) and support was found for four of the seven hypothesized paths. Overall, the model accounted for 47% of the variance in customer satisfaction (SMC = .47) and 37% of the variance in brand loyalty (SMC = .37).

Table 2
The results of hypothesized tests^{a b}

Hypothesized relationship	Proposed model	
	Standardized path coefficient (t-value)	Results
H1a: Price benefits → Customer satisfaction (β_{11})	.50 (3.74)***	Supported
H1b: Price benefits → Brand loyalty (β_{21})	-.02 (-.10)	Not supported
H2a: Souvenirs → Customer satisfaction (β_{12})	-.03 (-.28)	Not supported
H2b: Souvenirs → Brand loyalty (β_{22})	-.03 (-.30)	Not supported
H3a: Post-purchase services → Customer satisfaction (β_{13})	.37 (3.26)***	Supported
H3b: Post-purchase services → Brand loyalty (β_{23})	.35 (2.60)***	Supported
H4: Customer satisfaction → Brand loyalty (β_{21})	.35 (2.24)**	Supported

^a $\chi^2 [66] = 92.63 (p < .05)$, CFI = .95, GFI = .91, NNFI = .94, RMSEA = .05.

^b R^2 (Customer satisfaction) = .47, R^2 (Brand loyalty) = .37.

*** $p < .001$. ** $p < .01$. * $p < .05$.

The first two hypotheses concerned the relationship the price benefits and two outcomes of customer satisfaction and brand loyalty. The relationship between price benefits and customer satisfaction (H1a) is supported by the positive path coefficient (standardized $\beta_{11} = .50, t = 3.74, p < .001$), while the relationship between price benefits and brand loyalty (H1b) is not supported (standardized $\beta_{21} = -.02, t = -.10, n.s.$). H2 stated that the souvenirs and two outcomes of customer satisfaction and brand loyalty. As not expected, no relationship between the souvenirs and customer satisfaction (standardized $\beta_{12} = -.03, t = -.28, n.s.$) and brand loyalty (standardized $\beta_{22} = -.03, t = -.30, n.s.$) were discovered, thus H2a and H2b are not supported. H3 suggested that the post-purchase services positively related to customer satisfaction and brand loyalty. H3a and H3b are supported by significant and positive path coefficients (standardized $\beta_{13} = .37, t = 3.26, p < .001$; standardized $\beta_{23} = .35, t = 2.60, p < .001$; respectively). Further, the relationship between customer satisfaction and brand loyalty was also statistically significant (standardized $\beta_{21} = .35, t = 2.24, p < .01$), thus H4 is supported.

CONCLUSION

In Korea, most chain restaurants do joint-promotion with uniform benefits to the customers. Disregarding their customers' perceptions/preferences toward joint-promotion may result in a large waste of resources by the companies. Among the three joint-promotional strategies (i.e., price benefits, souvenirs, and post-purchase services) shown previously,

the price benefits related promotional strategy seems to be the most effective method to attract customers to the chain restaurants in Korea. Besides, it was shown that the customers who receive the benefits of discount prices tend to be more satisfied with the restaurant than those who do not get the price benefits; the present study showed that the attainment of price benefits (e.g., free meals, free beverages, and free desserts) was positively associated with the customer satisfaction. However, it was also shown that those who received the price benefits did not tend to develop brand loyalty to the chain restaurants. They seem to develop a loyalty to the price benefits but not to the chain restaurants that provide such benefits. Thus, if other competing restaurants offer more competitive prices, then they are likely to visit the restaurants with a better price offer. This suggests that the joint-promotion method that does not contribute to developing brand loyalty to the given restaurant is not a desirable strategy. Plus, the price benefit strategy may generate a bad margin for the restaurant, although it helps increase the number of customers and the total revenue. That is, the increased number of customers, driven by the price joint-promotion, requires more operating costs (labor cost, facility maintenance, and etc.), and the profit for each customer is likely to decrease. For this reason, price benefits seem to be a better promotional method for new opening restaurants to attract new customers as a short term marketing strategy than for the established restaurants. Post-purchase services (e.g., mileages accumulation and electronic newsletter), on the other hand, significantly affected the level of satisfaction and brand loyalty to the chain restaurants, although it was a much less powerful factor in restaurant selection processes than the price benefits. This result shows that the post-purchase services that helps familiarize the customers to the restaurants in a long-term period are effective ways of promotion. Souvenirs (e.g. samples, catalogues, and gifts) offering did not significantly affect the level of both customer satisfaction and brand loyalty to the chain restaurants. This study may have produced somewhat different results if the restaurants had provided the customers with more attractive souvenirs. However, since it appears to be virtually impossible to satisfy all the customers' tastes for souvenirs, marketers of the restaurants need to take some effective measure to adopt a souvenirs offering strategy. It seems to be appropriate that marketers recognize the characteristics of their restaurants and major target market and provide the souvenirs that could best match the identified characteristics. A good combination between the types of joint-promotion and the profiles of customers in chain restaurants can help enhance the level of both customer satisfaction and brand loyalty, which finally leads to more numbers of visits.

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FACTORS AFFECTING HOTEL CUSTOMERS' E-SATISFACTION AND PURCHASE INTENTIONS

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ABSTRACT

Despite the growing body of literature dealing with online consumer behavior, previous research has focused on Western customers and cultures rather than upon China, the world's largest emerging tourism market. The purposes of this study are to identify the determinants affecting Chinese hotel customers' online reservation intentions and to assess their satisfaction with online hotel reservation. The results indicate that Chinese hotel customers are less likely to rely on hotel branding and price and more likely to rely on information needs and online security as they become more experienced Internet users.

Key Words: online hotel reservation, e-satisfaction, purchase intentions, internet marketing

INTRODUCTION

In the past ten years, commerce on the Internet, or e-commerce, has experienced a great leap forward. There was a 54% increase in the number of people using the Internet to obtain travel information and make travel arrangements from 1998 to 2001 (Gregory & Breiter, 2001). The Internet satisfies these demands by allowing potential customers to learn about hotel facilities and to compare prices without contacting a hotel's sales representative (Connolly et al., 1998). The Internet offers the hotel industry a promising distribution channel that enables customers worldwide to book hotel rooms. Hotels use the Internet as a distribution channel to differentiate themselves from their competitors in the competitive market environment (Connolly et al., 1998; Van Hoof et al., 1999; Pernsteiner & Rauseo, 2000).

Knowing how the potential client conducts online information search is important for hotel managers if they are to improve their technology and adopt marketing strategies that facilitate the selection of their hotels. Considering the rapid growth of the Internet as a new hotel distribution channel, contemporary hoteliers need to gauge their customers' online purchase intentions and understand the factors that stimulate a purchase. Based on this understanding, hoteliers are able to customize the online reservation channel and improve service quality. Despite the efforts to study hotel customers' online purchase behaviors, much of the research has focused on Western customers and cultures. Empirical studies pertaining to e-commerce across the Asia-Pacific Rim, especially China, the world's largest emerging tourism market, remain rare despite the rapid growth in e-commerce in this part of the world (Wu et al., 2000). In response to these gaps, this paper identifies and analyzes the most important factors that affect hotel customer's online reservation intention and e-satisfaction level through an empirical study of Chinese hotel customers.

LITERATURE REVIEW

Considering the nature of tourism products and services (e.g., intangibility, complexity, diversity, and interdependence), consumers are more eager than ever for product-related information in order to minimize their purchase risk and close the gap between their expectations and the actual travel experience (O'Connor & Frew, 2002). The nature of consumers' search activity, involving multiple suppliers, facilities, prices, and availability, is facilitated by the search capabilities of the Internet. Tourism-related services have emerged as a leading product category for promotion and distribution through the Internet (Sussmann & Baker, 1996; Underwood, 1996; Connolly et al., 1998). Simply making product information accessible to customers, however, is not enough for effective distribution. Hence, a well-designed mechanism must allow customers to process their purchase. For decades, reservations by phone, letter or facsimile to travel agents or hotels have been traditional purchase choices. These processes, however, are time-consuming, indirect and ineffective. By perfectly meeting customers' information needs about products and services prior to purchase, the hotel

industry is benefiting from information technology, especially from online reservation, in satisfying customer expectations, in improving service, in increasing revenue, and in decreasing costs (Siguaw et al., 2000).

Prior work on website effectiveness and e-shopping has followed several themes. One theme was based on content analysis of websites and descriptive analysis regarding online users (e.g., Murphy et al., 1996; Jarvenpaa & Todd, 1997). Weber and Roehl (1999) provided a profile of people who use the Internet to search travel information or to purchase travel products. Other research concentrated on principles developed from human factors research in computer interface design. Lu and Yeung (1998) contended that human-computer interface design factors are applicable to commercial web applications. On the other hand, Phau and Poon (2000) generalized the buying behavior of Singaporean cybershoppers, suggesting a list of products that have greater potential in an interactive electronic shopping medium. Further, several researchers have considered user interface factors as predictors of the effectiveness of a website. For example, some work has reported on relevant operational attributes associated with using a website (e.g., Bauer & Scharl, 2000; Murphy et al., 2003). Potter (1994) and Murphy et al. (2003) recommended focusing on a more limited set of website factors and attributes related to users' broader perceptions of website characteristics.

In addition, Law and Leung (2000) and Rao (2000) indicated that online marketing managers should ensure adequate security to make e-commerce work, because security is a major consideration to customers who wish to purchase online. According to the study of Jeong et al. (2001), increasing customers' satisfaction with website information through high quality product provisions has a significant positive influence on customers' intention to make a reservation online. George and Stefanos (1999) claim that customers who have a positive experience with a seller's brand in a traditional shopping environment will find it easier and less risky to buy that seller's brand over the Internet. Additionally, Yoon (2002) found that personal traits of online customers such as familiarity with e-commerce, prior satisfaction with e-commerce, and receptivity to innovation have a significant impact on their level of satisfaction with the web sites.

METHODOLOGY

The questionnaire for the current study was designed with three sections. The first section measured customers' perceived importance of online hotel reservation. Nineteen attributes (5-point rating scale) were designed to measure the online hotel customers' perceived importance of each determinant based on related studies (Jarvenpaa & Todd, 1997; Webber & Roehl, 1999; Jeong et al., 2001; Yoon, 2002) and a focus group interview (three marketing managers and five guests). The second section was related to online reservation experience. If respondents had past online reservation experience, their satisfaction levels were measured (5-point scale). If not, their online reservation intentions were asked (5-point scale). The third section was designed to obtain the respondents' behavioral/demographic characteristics: browser used per week, length of Internet use, purpose of Internet use, gender, age, education level, occupation, and household income. After the completion of the questionnaire, it was then pre-tested by 20 guests at one of the sampling hotels.

The sample was drawn using a two-stage sampling method. In the first stage, twenty four-star domestic tourism hotels, which are comparable to four-star hotels in Beijing in terms of size and customer mix, were selected by the researchers. Among twenty four hotels, twelve hotels agreed to participate in the survey and allowed researchers to conduct on-site survey. In the second stage, a quota-sampling method was adopted. The number of questionnaires distributed in each hotel was based on its number of rooms. The participants in the study were Chinese hotel customers staying at the 12 sampling hotels in Beijing. The data was collected from March 1 to March 15, 2003. A total of 510 questionnaires was distributed. Out of the 510 questionnaires, 360 (70.6%) were returned and 317 (62.2%) were usable. Out of 317 usable responses, 111 were eliminated because the respondents indicated that they had never used the Internet before. After elimination, 206 questionnaires (40.4%) were coded and analyzed for the empirical investigation. The collected data was analyzed using descriptive statistics, factor analysis, and multiple regression analysis in order to achieve the objectives of this study.

RESULTS

The respondents were 52.4% males and 47.6% females. The largest age group was 26-45, represented by 63.6% of the respondents. Table 1 shows demographic profiles and internet usage of the respondents. Among the 206 respondents who had Internet experience, 35.0% had actually purchased hotel products and services through online channels. Among the respondents without any online reservation experience, 31.3% had made telephone reservations directly with hotels, 36.6% had booked hotel products and services via travel agents, and 32.1% had needed assistance, either from an employer or someone else.

A principal components analysis with varimax rotation was used to identify the structure of nineteen attributes. As a result, six factors with eigenvalues greater than one were extracted. The first factor, "information needs," comprised five

items: appropriate product/service information, latest product/service information, virtual experience of available amenities, variety of product/brand choice, and clarity of product/service information. The second factor, “service performance and reputation,” consisted of three items: company reputation and credibility, brand name, and product quality. The third factor, “convenience,” consisted of three items: ease of placing orders, ease of use, and 24-hour accessibility. The fourth factor was related to “price benefits,” including discount price and reduced purchase-related costs and the fifth factor was related to “technological inclination” including familiarity with e-commerce, previous satisfaction with e-commerce, and receptivity to new technological innovation. Finally, the sixth factor, “safety,” consisted of ease of canceling orders, easy payment procedure, and security of sensitive information. In order to test the reliability of each factor, Cronbach’s alpha of each factor was computed excluding factor 4, “price benefits.” Because “price benefits” included only two items, a correlation coefficient between the two items was calculated instead of Cronbach’s alpha score. The Cronbach’s alpha scores and the correlation coefficient ranged from 0.62 to 0.84 for the six factors.

Table 1
Demographic Profiles and Internet Usage of the Respondents

Variable	Frequency	Percent	Variable	Frequency	Percent
Gender			Education level		
Male	108	52.4	Below high school graduate	8	3.9
Female	98	47.6	High school	26	12.6
Age group			2 year college or associate’s degree	52	25.2
25 or under	46	22.3	Bachelor’s degree	85	41.3
26-35	81	39.3	Postgraduate	35	17.0
36-45	50	24.3	Occupation		
46-55	19	9.2	Retired	8	3.9
Above 55	5	2.4	Management/Executive	45	21.8
Prefer not to answer	5	2.4	Professional	54	26.2
Monthly income			Government employee	33	16.0
Under \$ 200	22	10.7	Self-employed/Owner	23	11.2
\$ 200 - \$ 299	73	35.4	Clerical/Sales	43	20.9
\$ 300 - \$ 600	78	37.9	Purpose of Internet use (multiple response allowed)		
Above \$ 600	33	16.0	Work/business	119	57.8
Length of Internet use			Education	71	34.5
Less than 6 months	9	4.4	Online Shopping	63	30.6
6 months – 1 year	49	23.8	Entertainment	121	58.7
1 – 2 years	42	20.4	E-mail communication	164	79.6
More than 2 years	106	51.5	Gather information for personal needs	103	50.0

In order to investigate whether the six factors had significant impacts on the dependent variables (e-satisfaction and purchase intention), two multiple regression analyses were conducted. Factor scores were used as the input variables. Both regression equations were determined to be significant. Based on the coefficient of each independent variable, it is possible to assess the impact of each variable on the dependent variable. Table 3 reveals that “information needs” was the most important factor in explaining the respondents’ overall e-satisfaction level. “Safety,” “convenience,” and “technological inclination” followed in importance. Since “service performance and reputation” and “price benefits” were not found to be significant, the coefficient values are of little importance in explaining customers’ e-satisfaction level. In contrast, the variable “technological inclination” was the greatest determinant in explaining the respondents’ online purchase intention. “Price benefits,” “service performance and reputation,” “safety,” and “convenience” followed in importance while the variable “information needs” was not found to be significant.

DISCUSSION

The results of this study suggested that “convenience,” “technological inclination,” and “safety” dimensions are significant for both e-satisfaction and online purchase intention, whereas “information needs” dimension is significant only for e-satisfaction and “service performance and reputation” and “price benefits” dimensions are significant only for online purchase intention. Convenience and safety were found to be the dimensions affecting both e-satisfaction and purchase intention. Shopping online can economize on time and effort by making it easy to locate merchants, find items, and procure

offerings (Szymanski & Hise, 2000). Online shoppers appear to be attracted to the ease of finding products on the Internet. Numerous studies have indicated that the main reason for non-purchasers' reluctance to purchase online was the credit card security problem (e.g., Szymanski & Hise, 2000; Law & Leung, 2000; Rao, 2000). The findings of this study are consistent with previous research concerning convenience and security issues. Furthermore, they imply that Chinese hoteliers and lodging developers who provide special attention to convenience and financial security may enjoy the most positive outcomes pertaining to e-satisfaction. Another important influence upon Chinese hotel customers' e-satisfaction and online reservation intention was "technological inclination." When studying customers' online purchasing behavior, technological inclination should be taken into account in that Internet shopping does require "receptivity of new technological innovation," "familiarity with e-commerce," and "previous satisfaction with e-commerce", and thus does not occur merely because customers decide to act. Further research is warranted to delineate the exact nature of "technological inclination," for example, skill and Internet connections. Hotels that offer online reservation may offer in-store kiosks for customers to learn how to purchase over the Internet.

Table 2
The Results of Factor Analysis

Factor ^a	Mean	SD	Factor Loading	Eigen Value	Variance Explained %
Fac1: Information needs (.84)^b				3.33	16.63
Appropriate product/service information	4.31	.81	.80		
Latest product/service information	4.14	.82	.75		
Virtual experience of available amenities	4.03	.83	.72		
Variety of product/brand choice	4.05	.90	.72		
Clarity of product/service information	4.00	.87	.62		
Fac2: Service performance & reputation (.81)				2.30	11.47
Company reputation & credibility	4.05	.92	.84		
Brand name	3.96	.89	.80		
Product quality	3.96	.94	.80		
Fac3: Convenience (.74)				2.09	10.45
Ease of placing orders	3.82	.97	.84		
Ease of use	3.79	.91	.80		
24-hour accessibility	3.86	1.01	.73		
Fac4: Price benefits (.76)				1.88	9.38
Discount price	3.78	1.03	.91		
Reduced purchase-related costs	3.70	1.03	.90		
Fac5: Technological inclination (.67)				1.85	9.23
Familiarity with e-commerce	3.77	1.04	.82		
Previous satisfaction with e-commerce	3.62	1.05	.80		
Receptivity to new technological innovation	3.56	1.08	.61		
Fac6: Safety (.62)				1.71	8.53
Ease of canceling orders	3.97	.95	.74		
Easy payment procedure	4.25	.80	.69		
Security of sensitive information	4.16	.90	.45		
Total variance explained					65.70
a. Principal component factors with iterations: Varimax rotation.					
b. Reliability score (a correlation coefficient for factor 4 and Cronbach's alpha scores for the other factors) for each factor grouping is shown in parentheses.					

On the other hand, the results of this study indicate that Chinese hotel customers are less likely to depend on reputation or price benefits as they become more experienced Internet users. As more consumers obtain access to the Internet and become adept at searching for product information, customers may become less reliant on product branding. Many hoteliers are very concerned that online consumers will focus on price, resulting in price wars. Our results definitely do not support this contention and created a more complex story, at least within the Chinese context. Although price is important, it cannot be the only basis of competition. Instead, marketers attempt to satisfy needs on the basis of benefits sought, meaning that price should be tied to value to the customers, not to costs. Consumers in other studies have indicated that price was the least important attribute when making online purchase (Gupta, 1995).

Among the six extracted factors, "information needs" is the most important factor for e-satisfaction. If the desired information is unavailable, a potential customer can and will go elsewhere. Opportunities for differentiation appear to rest

upon developments in hotel electronic transactions, providing interactivity and rich data, and taking online reservation to new heights of sophistication. For example, there still remains room to enhance the features of hotel websites in China, moving beyond those that offer a choice of language. As Chinese hotel customers are more informed about products and services on the Internet, they might be less willing to rely on information conveyed through conventional brand advertising but would want more information on the hotel websites and secure transactions, as shown in this study.

Table 3
Regression results

Factors	Dependent variable			
	E-satisfaction (n=144)		Purchase intention (n=268)	
	Std. _	t	Std. _	t
Fac1. Information needs	.468	6.668**	.095	1.186
Fac2. Service performance & reputation	.019	.268	.173	2.174*
Fac3. Convenience	.433	6.162**	.167	2.087*
Fac4. Price benefits	.112	1.592	.209	2.617**
Fac5. Technological inclination	.216	3.079**	.234	2.927**
Fac6. Safety	.462	6.584**	.173	2.169*
	R ² = .680, Adjusted R ² = .650		R ² = .292, Adjusted R ² = .277	
	F = 22.977**		F = 19.687**	

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

Limitations

The results cannot be generalized to all Chinese hotel customers, because the subjects of this study were selected on the basis of their patronage at the 12 selected hotels in Beijing. Further, there are limitations apart from sampling issues. First, the results may not be generalized to different customers with different hotel patronage purposes since this study did not inquire into customers' travel purposes. Second, this study is not free from the issue of "technology-sensitive" customers. The respondents might have agreed to participate in the survey because they were more interested in the topic of online reservation. Finally, customers' past behavior was collected on a self-report basis. Perhaps future efforts could obtain customers' actual behavior in order to minimize the drawbacks of self-reported data.

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ANTECEDENTS OF SUCCESSFUL U.S. INTERNATIONAL RESTAURANT FRANCHISING:
DELVING INTO THE CHALLENGES AND NEEDS OF THE AMERICAN FRANCHISING RESTAURANTS
IN THE INTERNATIONAL MARKETS

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ABSTRACT

This paper identifies international franchising restaurant chains' critical success factors and operational strategies. Relevant literature was reviewed in an attempt to discuss several issues related to international restaurant franchising. In an effort to identify operational strategies on the international restaurant franchising, a self-structured survey questionnaire was developed and was distributed to restaurant managers operating American franchising restaurants in Korea. The findings of the study reveal several operational strategies and critical success factors. Furthermore, this study offers the U.S. restaurant operators suggestions about what they need to understand in order to succeed in the foreign markets and what may be appropriate and effective operational strategies.

Key Words: International Franchising, Training, Critical Success Factors

INTRODUCTION

One of the critical success factors that has led to today's remarkable international development of the U.S. restaurant chains is the use of international franchising (Alon & McKee, 1999; Erogu, 1992). The international franchising allows U.S. restaurant operators to enter foreign markets with minimal financial risks because local franchisees contribute to significant financial investments (Sen, 1998). With the emerging importance of international franchising in developing foreign markets, the plethora of researchers (Alon & McKee, 1999; Erogu, 1992) has established research pertinent to the international franchising area. However, most of the research has tended to focus on developing conceptual models for international franchising and on identifying American franchisors' needs and perspectives. Despite the significant contribution of international franchisees on the development of international franchising, very few studies have been conducted to investigate the international franchisees' needs and perspectives (Erogu, 1992). Therefore, there is a void in the theoretical understanding of whether, and how, international franchisees perceive problems in operating the U.S. franchising restaurants. This paper attempts to fill that void. The U.S. franchising restaurants in Korea were chosen in this study since Korea is one of the fastest growing international markets for U.S. restaurant franchisors (Kim & Chon, 2003). The U.S. franchising restaurants will continue to grow in the Korean market because the increased disposable income, leisure time, the growing number of working-women, and the preferences of Western restaurant chains in Korea have led Korean consumers to dine out more frequently (Lee & Ulgado, 1997).

- What are major factors influencing in the selection of the U.S. franchising restaurant brands?
- What are critical success factors of the U.S. franchising restaurants in the Korean market?
- What are the major areas of training that are needed from the U.S. franchisors?
- What are favorite U.S. franchising restaurant brands?
- What are appropriate sites in developing franchising restaurants in Korea?

LITERATURE REVIEW

Factors affecting the International Franchising Success

Determining whether or not firms enter foreign markets is considered to the most challenging issue among the U.S. hospitality operators (Borde & Atkinson, 2000). Entering foreign markets entails several risks, such as currency exchange risks and country risks, associated with a host country's economic, political, legal and social conditions (Borde & Atkinson, 2000). Because of these several risks, hospitality firms prefer to use franchising in developing foreign

markets (Alon & McKee, 1999). One of reasons that hospitality firms like to use franchising in their foreign expansion is because the nature of franchising business does not require franchisors to invest a high portion of initial asset investments compared to other international entry modes such as direct investment (Erogu, 1992).

In particular, in international franchising, international franchisees play a key role as an agency for franchisors in many different ways, such as developing local menus and operating local franchising outlets (Alon & McKee, 1999). Nonetheless, employing the international franchising system requires considering several issues carefully due to geographic and cultural distances between host countries and foreign markets which might challenge the U.S. franchisors in monitoring international franchising operation systems (Alon & McKee, 1999). It is crucial for the US franchisors to develop competitive capabilities to manage and oversee foreign franchising systems effectively. Because of such high limitations related to supervising foreign franchisees, to date, the U.S. franchisors prioritize expanding only certain foreign markets such as Canada, where its cultural and geographical distances are relatively similar (Alon & McKee, 1999). As a result, the heavy emphasis of certain countries underlies huge market competition in these countries. Subsequently, the U.S. franchisors need to find their franchising growth in new foreign markets such as the Pacific Rim region, where a region that did not emphasize in the past because of high geographical and cultural distances (Alon & McKee, 1999).

The Characteristics of Asian Markets & Risks

A series of recent incidents occurred in the U.S. franchising restaurants in certain Asian countries such as Korea and China exacerbated the U.S. restaurants' brand values (Moon, 2004). For example, a number of McDonald's and Burger King's franchisees in Korea were sued because they did not pay overtime wages to their teenager part-time employees (Moon, 2004). In China, many U.S. franchisees did not establish rigorous food safety and quality standards and failed to keep local food sanitation policies (Chang, 2002). These incidents might result from the lack of franchisee training and inappropriate selection of franchisees (Chang, 2002). Christopher and Rangan (1992) illustrated that the KFC Japan struggled in the early stage of the development of Japanese market because KFC headquarter management ordered the KFC Japan to follow the same management as the U.S. operation systems, ranging from menu items to the size of an outlet. However, the replica of American franchising systems without considering local markets' characteristics caused several problems (Christopher & Rangan, 1992). For example, the big size of KFC restaurants originally designed for the U.S. market did not reflect high real estate costs in Japan and impacted the firm's high fixed costs negatively. After the failure of the Japanese market in early 1970, the company reduced the size of its outlets significantly according to Japanese market characteristics.

METHOD

Survey questionnaire

A self-administered questionnaire was used to identify critical success factors and operational issues such as training needs in operating the U.S. franchising restaurants in Korea. The questionnaire was developed based on the literature reviews (Alon & McKee, 1999; Christopher & Rangan 1992; Hing, 1999). The questionnaire consisted of 5 sections. The first section was developed to identify the primary considerations in selecting American franchising restaurant chains. The second section, dealt with the critical success factors which franchisee restaurant managers consider in operating the U.S. franchising restaurant. The third section focused on the areas which require training from franchisors. In the fourth section, respondents were asked to indicate their preferred American restaurant franchising brands as well as preferred locations to open an American franchising restaurant. The fifth part concentrated on respondents' demographic information. The questionnaire was originally developed in English and translated into Korean by a professor and a Ph.D. student who were fluent both in English and Korean, and the survey was back-translated into English to test the reliability of the translated instrument. A total of eighty survey questionnaires were distributed to U.S. franchising restaurant managers via mail during the month of September 2004 in Seoul, Korea. Fifty-seven survey questionnaires were collected which generated a response rate of 71%.

FINDINGS

The majority of the participants were between the ages of 26 and 45 (84.3%) while only 10% of the participants were between the age of 19 and 25. Only a few participants were between the ages of 46 and 55. Table 1 shows the critical success factors of the U.S. franchising restaurants in Korea.

As shown in Table 1, cleanliness (6.47), high quality of food (6.42), and menu price value versus service and product value (6.35) are the most important critical success factors among respondents while overcoming anti American sentiments (4.07); overcoming cultural barriers between American franchisors and Korean franchisees (4.49) are considered less important critical success factors.

Table 1
Critical Success Factors of U.S. Franchising Restaurants in Korea

Variables	Rank	Mean	Standard Deviation
Cleanliness	1	6.47	.804
High quality food	2	6.42	.778
Menu price versus service and product value	3	6.35	.834
Ongoing training	4	6.30	.886
Customized marketing	5	6.12	.781
Brand value	6	6.12	.965
Fresh and quality supply from suppliers	7	6.04	1.133
Customized advertising	8	5.96	.925
Interior and design	9	5.82	1.104
Frequent communication between franchisor and franchisee	10	5.53	.984
Understanding local culture, law	11	5.46	1.135
Customized menu	12	5.39	1.373
Overcoming cultural gap	13	4.49	1.325
Overcoming anti America	14	4.07	1.474

Note: 7 points Likert scales ranging from 1 to 7 where 1= not at all important and 7=very important

Table 2
The Areas that Require Training

Variables	Rank	Mean	Standard Deviation
Service training	1	6.38	.885
Food preparation training	2	6.14	.923
Safety training	3	6.13	.992
Recruitment	4	6.09	.996
Accounting	5	5.54	1.078
Suggestive/ up-selling training	6	5.50	1.044
Beverage training	7	5.18	1.081

Note: 7 points Likert scales ranging from 1 to 7 where 1= not at all needed and 7= the most needed

Table 2 presents the training areas which franchisees need the most from American restaurant franchisors. As presented in Table 2, the respondents indicated that service training (6.38), food preparation training (6.14) and safety training (6.13) are areas that the franchisees need the most training from the U.S. franchisors whereas beverage training such as wine information (5.18) and suggestive/ up-selling training (5.18) are ranked at the bottom of the training needs. Respondents were also asked to indicate preferred U.S. restaurant franchising brands. Table 3 presents preferred U.S. restaurant franchising brands.

Table 3
Preferred Franchising Brands

Restaurant Brand	Rank	Mean	Standard Deviation
Starbucks	1	5.32	1.465
Outback	2	5.27	1.496
Baskin Robbins	3	5.19	1.287
Pizza hut	4	4.91	1.404
Dunkin Donuts	5	4.65	1.547
Burger king	6	4.65	1.714
TGI Friday	7	4.59	1.734
Bennigance	8	4.40	1.443
McDonald's	9	4.35	1.588
Domino Pizza	10	4.22	1.718
Subway	11	3.76	1.805
Chilli's	12	3.26	1.206

Wendy's	13	3.00	1.657
Hardee's	14	2.96	1.264

Note: 7 points Likert scales ranging from 1 to 7 where 1= the least preferred and 7=the most preferred

As shown in Table 3, Starbucks (5.32), Outback Steak House (5.27), and Baskin Robbins (5.19) are ranked as the top preferred franchising restaurant chains that the respondents would like to operate in the future. Interestingly, some famous fast-food brands such as Wendy's (1.66) and Hardee's (1.26) are considered the least popular franchising restaurants. Table 4 summarizes the sites where the respondents preferred to open franchising restaurants.

Table 4
Preferred Franchising Restaurant Locations

Variables	Rank	Mean	Standard. Deviation
Department store	1	5.72	1.071
Shopping mall	2	5.33	1.294
University	3	4.96	1.508
Airport	4	4.96	1.440
Bus station	5	4.78	1.788
Train station	6	4.64	1.850
Museum	7	4.37	1.574
School	8	4.12	1.633
Tourist attractions	9	3.98	1.486
Banks	10	3.88	1.545
Hotel	11	3.87	1.555
Book store	12	3.76	1.598
Hospital	13	3.49	1.636
Gas station	14	2.81	1.415
Library	15	2.78	1.418

Note: 7 points Likert scales ranging from 1 to 7 where 1= the least appropriate and 7=the most appropriate

As shown in Table 4, department stores (5.72) were ranked as the most appropriate restaurant site followed by shopping malls (5.33) and universities (4.96). On the other hand, the respondents answered that libraries (2.78), gas stations (2.81) and hospitals (3.49) were not ideal sites in locating American franchising restaurants in Korea.

DISCUSSION AND MANAGERIAL IMPLICATIONS

The findings of this study indicated that critical success factors such as the cleanliness of restaurant, high quality food and competitive product prices are the most important critical success factors. This implies that any restaurants couldn't succeed without sticking to the basic operational policies such as cleanliness and high quality food. On the other hand, overcoming cultural differences between foreign franchisors and host country franchisees, and overcoming anti-American sentiments, are considered to be less important than the essence operational issues. Even though there exists a certain degree of sentiments on the anti-Americanism across the country, the respondents did not concern them as major issues in operating the U.S. franchising restaurant. It is suggested that the U.S. franchisors reinforce the basic restaurant operational issues such as cleanliness and product quality to international franchisee operators through offering ongoing trainings and establishments of thorough quality evaluations. The results of the study showed that service, food preparation, and food sanitation are the areas that the respondents like to receive the most training from U.S. franchisors compared to other areas such as beverage preparation training. Even though there exist challenges to train the international franchising operations due to the geographic and language problems, U.S. franchisors need to find ways to deliver ongoing and competitive training to international franchisee. For example, establishing mystery shoppers programs might be helpful to ensure the service quality of international operations (Christopher & Rangan, 1992). Developing computer-oriented training programs, such as CD-Rom, might overcome the geographic distance.

Study results indicated that Starbucks, Outback, and Baskin Robins are the U.S. brands that respondents preferred the most. Interestingly, these brands include a coffee shop, a steak restaurant, and an ice cream franchising business. This means that a variety of franchising restaurants could appeal to today's younger generations in Korea compared to the past where most American franchising restaurants are the U.S. fast-food restaurants in the country. Indeed, McDonald's was ranked as 9th out of 14 brands in the level of the preferred franchising brand. Currently, McDonald's operates more than

330 outlets in Korea, employing more than 12,000 people. This result recommends that there are more opportunities other than fast-food restaurants, such as casual restaurant and coffee sectors, in the market since the traditional fast-food market has become saturated in Korea similar to the United States. For example, Starbucks Korea, which opened its first coffee shop in 1999, now operates 107 outlets. Such a high growth of the Starbucks Korea was made because the firm made significant efforts to understand local customers' needs and cooperated with local franchising partner (Kim & Im, 2004). This study also illustrates that department stores are the most appropriate site, followed by shopping malls and universities in developing the U.S. franchising restaurant. Department store is one of the most popular places where Koreans like to shop. Department stores usually have a number of attractions such as cinemas, in addition to shopping stores. Therefore, locating a restaurant inside a department store has a number of benefits because the department store itself attracts a huge number of consumers all year long. Furthermore, certain operational issues such as parking problems can be solved by using the parking spaces of the department store.

In conclusion, the U.S. restaurant industry has faced tremendous challenges in a turbulent environment. The industry has been challenged by fierce competition, a saturated market, the increasing food safety issues, the shortage of labor and rapidly changing consumers' needs. Subsequently, the industry should find new markets, such as Korea, in order to continue to grow. International franchising is one of the most competitive entry modes that the U.S. restaurant operators could employ. In order to take advantage of the international franchising, franchisors should understand local markets and business environments thoroughly which lead firms to succeed in the international markets. Even though this study provides a number of meaningful results to academia as well as restaurant operators, this study has certain limitations. The study used only 57 samples which might lower the reliability of the study. In addition, the study used a convenience sampling method which might limit the validity of the study.

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DOES WALL STREET TRULY UNDERSTAND THE LODGING VALUATION?

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ABSTRACT

Lodging stock undervaluation has been a longstanding issue in the industry. The proponent of lodging stock undervaluation contributes the occurrence to Wall Street's lack of comprehension of the lodging business. The opponent dismisses this claim by stating the unlikelihood of Wall Street having such extensive knowledge on all industries except this particular industry. To empirically investigate whether or not lodging stock is in fact undervalued, an equity valuation model was employed. The results support that the lodging stock was undervalued compared to the non-lodging industry during the sample period of 1990s.

Key Words: Lodging, Undervaluation, Residual Income Model, Equity Value

INTRODUCTION

Lodging stock undervaluation has been a longstanding issue in the hotel industry. Many market experts, industry educators and managers have participated in, or at least been exposed to, discussions and/or arguments over this issue. Walsh (2003) reported comments by John Emery, President and C.O.O. of Interstate Hotels & Resorts that "lodging securities are undervalued and in an effort to rectify this problem, hotels need to deliver all the details regarding their financial and non-financial activities to investors and potential investors alike". However, there is no clear consensus in the lodging industry on undervaluation. For example, Nozar (1999) argued that it was hard to believe lodging securities were particularly undervalued due to the popular notion that Wall Street does not have a great understanding of the lodging business. He questioned, "Why is it that hotel stocks are so undervalued, is no one rushing to purchase them?" In summary, the proponents of lodging stocks undervaluation phenomenon lay responsibility on Wall Street's lack of comprehension of the lodging business. The opponent dismisses this claim by stating that the likelihood of Wall Street having extensive knowledge on all industries except lodging is quite remote. Despite an extensive search of the literature, we did not find any research papers that dealt with this issue. In this paper we attempt to empirically answer this question whether lodging stocks are systematically undervalued by Wall Street.

We start with a well established equity valuation model (Residual Income model, henceforth the RI model), estimate the equity values of all publicly traded firms, and then use various comparisons to determine the magnitude of lodging undervaluation. In addition, to bolster our research findings and eliminate the problem of mismatched samples, we also compare the lodging valuation to many different portfolios of stocks, e.g., real estate and service industry.

Selection of the Equity Valuation Model

Many different methods are used by academic researchers to estimate equity valuation. For example, some of the most common methods include the dividend discount method, discounted cash flow method, residual income method, etc. Each method focused on similar data using different formulations of the accounting statements. There have been many research papers published in the mainstream accounting and finance literature which have attempted to determine which method predicts equity values that most closely approximate the actual equity values observed in the market place. Some of the papers include Penman and Sougiannis (1998), Francis et al. (2000), and Courteau et al. (2000).

Penman and Sougiannis (1998) use portfolio approach to investigate three different equity valuation models – dividend, free cash flow, and residual income models – to examine superiority in terms of valuation errors. They focus "on a practical issue: dividend, cash flow, and earnings approaches are equivalent when the respective payoffs are predicted to infinity, but in practice, forecasts are made over finite horizons" (346). They, therefore, explore different magnitudes of valuation errors of three equity valuation models forecasting over one-, two-, five-, eight-year finite horizons. They conclude that the residual income model, which employs accrual accounting numbers, generates better forecasting numerals with lower valuation errors than the cash flow methods – dividend and free cash flow models.

Instead of using portfolios Francis et al. (2000) use forecasting figures for five years of individual firms provided by “Value Line” to investigate the superiority of the three different equity valuation models in terms of accuracy (defined as the absolute price scale difference between the value estimate and the current security price) and explainability (defined as the ability of value estimates to explain cross-sectional variation in current security prices). Arbitrary growth rates of either zero or four percent are assumed after a five year period. They state their main objective as “to present a pragmatic exercise comparing the reliability of these value estimates, recognizing that the forecasts underlying them may be inconsistent” (46). They conclude that the residual income model estimates are more accurate and explain more of the variation in security prices than do dividend and free cash flow models.

Courteau et al. (2000) study equivalence of different equity valuation models by replacing the arbitrary growth rate approach used in valuation models by Francis et al. (2000) with a price-based terminal value calculation provided by Value Line. They state their research objective as “to explore whether, over a five-year valuation horizon, DDM (Discounted Dividend Model), DCF (Discounted Cash Flow Model) and RIM (Residual Income Model) are empirically equivalent using Penman’s (1998) theoretically “ideal” terminal value expressions in each model” (2). They replicate the same results of Francis et al. (2000) that the residual income model is superior to cash flow models – dividend and free cash flow models.

In retrospect, it was surprising that despite the theoretical equivalence of the models, considerable effort was expended to find out the best model. Lundholm and O’Keefe (2001a), however, criticize the previous literatures for inconsistencies in the computations incorporated into models and data, and claim equivalence of the three equity valuation models.

Lundholm and O’Keefe (2001a) argue the conclusion that residual income model is superior to cash flow models. Their reasoning is based from the fact that the three equity valuation models are rooted in the same theoretical background and therefore should be equivalent. Their second purpose is to identify incorrect practices using equity valuation models. They point out three specific inconsistencies that analysts and researchers often make in operating equity valuation models, which are the inconsistent forecasts errors, the incorrect discount rate errors, and the missing cash flow errors.

MODEL SPECIFICATION

The study specifically employed two models: Capital Asset Pricing Model (henceforth CAPM) to estimate cost of equity and residual income (henceforth RI) model to estimate equity value. CAPM was used to compute the firm specific cost of equity. The cost of equity was then inserted into the RI model to compute the estimated equity values (EEV) per firm.

Residual Income Valuation Model

The residual income valuation model assumes an accounting identity to express equity values as a function of book values and residual incomes.

$$P_e = SE_0 + \sum_{t=1}^T \frac{RI_t}{(1+r_e)^t} + \frac{RI_{T+1}}{(r_e - g)(1+r_e)^T}$$

Notes:

P_e = Value of the equity holders’ claim at time 0.

RI_t = Residual income for the period ending at time t; $RI_t = NI_t - r_e SE_{t-1}$.

r_e = Cost of equity capital (firm-specific discount rate used in this paper).

SE_t = Shareholders’ equity for the period ending at time t.

NI_t = Net income for the period ending at time t.

g = Average growth rate beginning in year $T + 1$.

The RI model is built as an intuitively appealing earnings-based formulation. Based on the RI model, a firm’s market value is determined by the firm’s book value plus residual income. The residual income is defined as the difference between actual income and expected income. The expected income is the beginning stockholder’s equity multiplied by the cost of equity. It is this cost of equity that is calculated based on CAPM. The reasoning behind this formulation is that a firm’s value is derived from its ability to earn above what its assets are expected to earn. If the firm makes only required earnings on its book value, investors will not pay more than the book value. If the firm makes more earnings than the required, the investors will pay more than the book value. Therefore, the deviation of the firm’s market value from the book value is determined by the residual income (Palepu, Healy & Bernard, 2000). A crucial part of valuing the firm is the

estimation of the required rate of return on equity. This paper uses the well known CAPM model to estimate the required rate of return on the stockholders equity.

CAPM Model

The firm-specific discount rate was estimated by using the following CAPM model:

$$r_E = r_f + \beta[E(r_m) - r_f] \quad (1)$$

where:

r_E = firm-specific discount rate;

r_f = intermediate-term Treasury bond yield minus the historical premium on Treasury bonds over Treasury bills (Ibbotson Associates [2001]);

β = estimate of the systematic risk for the firm. Firm-specific betas are calculated using daily returns over each fiscal year for the sample period;

$E(r_m) - r_f$ = market risk premium = 6%.

Data Selection

Firm-Specific Betas: we first gathered data of daily stock prices and daily S&P composite returns for each firm on the CRSP/COMPUSTAT merged database for the entire sample period. Then we regressed daily firm stock prices on S&P composite returns. The coefficient of this regression is a firm-specific beta. This firm-specific beta was plugged into the CAPM model to compute annual cost of equity for each firm. We re-estimated cost of equity for each firm for each year. In other words, the cost of equity for each firm was allowed to vary across years.

Valuation Errors: Special attention was given to the *inconsistent forecasts error* issue mentioned in Selection of the Equity Valuation Model section of this paper. We followed the exact instructions given by Lundholm and O'Keefe (2001) to ensure that inconsistencies did not occur in our study. The *incorrect discount rate error* issue was not considered because this paper employed the RI model and that issue only applies to the free cash flow model. The *missing cash flow error* is assumed to occur in our study; however, the errors due to this issue are expected to be small and therefore ignored.

Firm-Specific Growth-Rate: The firm-specific growth rate was computed by averaging future 5-year sales growth. Estimated equity values (EEV) for each firm were computed by using the RI model as presented above and used for further analysis.

Data Sources: The RI model required financial data (from *Compustat*), daily stock prices for firms (from *CRSP*), and daily S&P composite returns (from *CRSP*). We used historical data rather than forecasted data in this study because many Wall Street firms do not follow the lodging industry extensively and therefore, there is very limited availability of earnings forecasts by analysts. For example, I/B/E/S and Value Line, the two most well known data sources for earnings estimates, do not provide enough forecasting data for the lodging industry.

Sample Period: The sample period was from 1990 to 1999. To estimate 1999 equity values, financial data from 1998 to 2003 was used. Currently, 2004 financial data are not completely available, and therefore the last year of our sample period became 1999. The sample period of 1990 to 1999 represents 1990s neatly.

Estimation of Variables: Daily stock prices and daily S&P composite returns were used to calculate firm-specific beta and cost of equity as presented earlier in this paper. The cost of equity was then introduced to the RI model to compute estimated equity values (EEV). Other historical financial data for the RI model was collected over the period from 1989 to 2003: net income (DATA172), stockholders' equity (DATA216), and common shares outstanding (DATA25).

Each of the 6-year period's financial data was used to calculate EEV per year from 1990 to 1999. For example, to calculate 1990 EEV, we needed net income, shareholders' equity, and cost of equity data from 1990 to 1994. In addition to this, shareholders' equity data was needed from 1989 to 1993 because the RI model uses previous period shareholders' equity data as shown in Model Specification section. Therefore, based on the data from 1989 to 2003, EEV from 1990 to 1999 could be computed for the lodging industry and non-lodging industry. The non-lodging industry excluded the lodging industry to make the comparison more meaningful. Additional sensitivity tests were also performed using different specifications of the non-lodging industry comparisons, one excluding financial and regulated firms, and a service industry group.

EEV was subtracted from MEV (market equity value), which is computed by averaging daily stock prices for each January. To control for size, the difference between MEV and EEV was scaled by total assets (TA) to get the final

difference (DIFF). We did not use MEV to scale DIFF in our study because it does not produce comparable measures. For example, let us assume that MEV is \$10 and EEV is \$2. Then, DIFF is \$8 and the result scaled by MEV will be 0.8 ($= \$8/\10). This time, let us assume that MEV is \$2 and EEV is \$10. Then, DIFF is -\$8 and the result scaled by MEV will be -4 ($= -\$8/\2). To accomplish the purpose of our study, the two results are supposed to provide the same magnitude to overvaluation and undervaluation phenomena. However, the example above shows that it is not the case; the results erroneously will support the undervaluation. This is why we used total assets instead of the market equity value. If we assume that the RI model produces unbiased true estimates and lodging DIFF is greater (less) than 0, the lodging stock can be interpreted as overvalued (undervalued) because actual stock price is bigger (smaller) than the estimated price. This same interpretation applies to non-lodging DIFF as well. Notice that we are not assuming that the RI model is an unbiased estimator of equity values. We are though making a less restrictive assumption that the directionality of the bias (if it exists) is non-discriminatory between different portfolios (lodging and non-lodging).

Under the less restrictive assumption of non-discriminatory bias in the estimation of equity values using the RI approach, we need to compare the EEV of the lodging industry with the non-lodging industry and other service industry comparison portfolios. For example, if it is determined that the lodging industry is undervalued by 10%, then we compare the extent of the undervaluation to the entire universe of stocks on COMPUSTAT. If the portfolio of all stocks is also undervalued by 10%, we cannot make a claim that the lodging industry is undervalued. However, if the magnitude of undervaluation of the total portfolio is only 2% or less, we can legitimately conclude that the lodging industry is undervalued. By setting up the experiment in this way, we are creating a higher hurdle to overcome, before we can conclude whether there is any valuation problem in the lodging industry.

A simple example will illustrate the comparisons we are trying to make to investigate the undervaluation claim. Let us assume that the market value of a lodging stock is \$12 and the estimated value is \$7. The difference between the two values is \$5 and we further scale it by assets (\$10) of the firm and call the resultant value (0.5) as lodging DIFF. If we could assume that the RI method produces unbiased estimates of equity values, our work would have been done. We would then claim that the lodging stock is over valued. However, under our assumption that we cannot assume unbiased equity values, we also look at the portfolio of non-lodging stocks. Let us also assume that the market value of a non-lodging stock is \$20 and the estimated equity value is \$17. We scale the difference by the total assets (\$10) of the firm and the resultant value (0.3) is called as non-lodging DIFF. Finally we can compare the lodging DIFF 0.5 against non-lodging DIFF 0.3. If the difference is statistically significant and because lodging DIFF is bigger than non-lodging DIFF, we can claim that lodging stocks are relatively overvalued as compared to the non-lodging stocks. We perform similar portfolio comparisons between lodging stocks and real estate stocks and also a service industry portfolio. A *t*-test was performed to examine the undervaluation issue for 10-year sample period from 1990 to 1999. The data was truncated if DIFF fell below 1st or beyond 99th percentiles.

EMPIRICAL RESULTS

Table 1 provides descriptive statistics of lodging and non-lodging sample data. After all the screens, the sample size for the lodging firms is 48.

Table 1
Descriptive Statistics [†]

Lodging	N	Mean	SD	Min	Max
MEV	48	21.58	19.69	1.36	74.12
EEV	48	18.70	22.20	1.22	127.11
TA	48	41.70	29.00	11.12	151.68
DIFF	48	0.01	0.87	-4.12	1.58
Non-Lodging ^{††}	N	Mean	SD	Min	Max
MEV	13145	24.39	22.83	0.06	576.80
EEV	13145	22.90	49.07	0.00	2,489.18
TA	13145	63.17	106.75	0.11	2,066.09
DIFF	13145	0.33	1.22	-4.69	6.49

[†] Notes:

MEV: Market Equity Value; EEV: Estimated Equity Value; TA: Total Assets; DIFF = (MEV – EEV)/TA

^{††} Non-Lodging includes all 48 industries categorized by Fama and French (1997). One of the original categories is “Restaurants, Hotels and Motels” and lodging firm samples were deleted from this category.

As explained previously, we started with all firms in the COMPUSTAT and CRSP databases and applied our screens. The final non-lodging sample size is 13,145. The biggest screen (resulting in the highest loss of firms) was the requirement of six consecutive years of data to estimate each firm’s estimated equity values (EEV). For example, to compute the 1999 estimated equity value, the RI model required financial data from 1998 to 2003. Another screen that reduced the sample size was that to be able to control for confounding events (e.g., economic events at different time periods), we kept only December year-end firms in the final sample.

The mean estimates computed by the RI model suggest that both of lodging (0.01) and non-lodging (0.33) stock prices were overvalued for the sample period if we assume that the RI model produces unbiased true estimates. The suggestion was not statistically tested to make any inferences because, as discussed previously, it is extremely unlikely that the RI model would give out unbiased true estimates. Recall that our contention is that we would like to make a comparison between lodging and non-lodging stocks. Therefore, additional *t*-tests on the lodging and non-lodging stock differences were conducted to determine if in fact a portfolio of lodging stocks is more likely to be undervalued as compared to a portfolio of non-lodging stocks. Fama and French (1997) supplied 48-industry classification and we additionally compared the lodging industry portfolio to each of the categories to detail and meaningful analyses. The results of *t*-tests are presented in Table 2.

Table 2
Lodging vs. 48 Industries Comparisons[†]

Lodging ^{††} vs.		<i>T</i> -Test	
		N	P-value
Non-Lodging		13145	0.0145*
Univariate Tests			
		<i>T</i> -Tests	
	Industry	N	P-value
Lodging vs.	Food Products	156	0.0141*
	Candy and Soda	37	0.0025**
	Alcoholic Beverages	63	0.0169*
	Recreational Products	98	0.0052**
	Entertainment	133	0.0321*
	Consumer Goods	221	0.0259*
	Healthcare	154	0.0178*
	Medical Equipment	227	<.0001***
	Pharmaceutical Products	380	<.0001***
	Machinery	457	0.0046**
	Electrical Equipment	141	0.03668*
	Shipbuilding	17	0.0133*
	Defense	36	0.0227*
	Precious Metals	123	<.0001***
	Telecommunications	277	0.0002**
	Personal Services	51	0.0009**
	Business Services	787	<.0001***
	Computers	337	<.0001***
	Electronic Equipment	538	<.0001***
	Measuring and Control Equipment	239	0.0003**
	Retail	245	0.0021**
	Restaurants ^{†††}	141	<.0001***
	Real Estate	119	0.0055**

[†] All comparisons were made in DIFF values.

^{††} Lodging sample size is 48.

^{†††} Original category by Fama & French (1997) is “Restaurants, Hotels and Motels”. However, hotel and motel samples were deleted to compare restaurants to the lodging sample.

^{††††} *, ** and *** indicate significance at alpha level of .05, .01 and less than .0001, respectively.

A *t*-test of the differences between lodging with the non-lodging portfolios reveals that the lodging portfolio is significantly undervalued as compared to the non-lodging stocks (*t*-value of -2.54 with the *p*-value of 0.0145). This suggests that the lodging stock was significantly undervalued compared to the non-lodging stock.

Additional *t*-tests with 48 industry groups were conducted and those groups that differed significantly from the lodging industry sample are presented in Table 2. Out of 48 industry comparisons, the lodging stock appeared to be significantly undervalued compared to 23 industries at the alpha level of 5%. The lodging stock does not appear to be significantly overvalued compared to even one industry.

We performed two additional *t*-tests with a modified industry group and service industry group. The modified industry group comparison was performed because some particular industries are typically excluded from the analyses for many studies. This exclusion happens because some finance companies and highly regulated companies have different financial structures and therefore inclusion of them may distort the results. Modified industry group excludes shipbuilding, defense, nonmetallic mining, coal, utilities, petroleum and natural gas, telecommunications, transportation, banking, insurance, and trading industries. The sample size is reduced to 7,506. As reported in table 3, the *t*-test still supports that the hypothesis that lodging stock portfolio was significantly undervalued as compared to the modified industry group for the sample period ($t = -4.13$, *p*-value = $<.0001$). It is possible that the lodging industry appears undervalued because the directionality of the bias is reversed between lodging and non-lodging stocks possibly because of different business and financial structures. For example, if the RI model were to produce negatively biased estimates for the lodging industry while it may provide positively biased estimates for other industries, e.g., manufacturing and retail industries. Therefore, as a further sensitivity check on our results, we also performed a *t*-test with service industry group. In this portfolio we included industries that are typically thought of as belonging to the class of service industries, including food products, candy and soda, alcoholic beverages, recreational products, entertainment, printing and publishing, healthcare, personal services, business services, retail and restaurants industries. The *t*-test (reported in table 4) supports the lodging stock undervaluation phenomenon with the *t*-value of -5.39 and the *p*-value of less than 0.0001. Finally comparison with the real estate sector also revealed a significant difference.

Table 3
Lodging vs. Modified Industry Group Comparisons

Lodging vs.	T-Test		
	N	<i>t</i> -value	P-value
Modified Industry Group	7506	-4.13	<.0001***

Table 4
Lodging vs. Service Industry Group Comparisons

Lodging vs.	T-Test		
	N	<i>t</i> -value	P-value
Service Industry Group	2191	-5.39	<.0001***

DISCUSSION AND CONCLUSION

Empirical analyses utilizing an equity valuation model (residual income model) revealed that, in general, lodging stocks are undervalued when compared to three different comparisons groups; entire universe of non-lodging stocks, excluding regulated and financial stocks and finally a comparison with a service industry group. Lodging stocks were also compared individually to each of the 48 industries classified by Fama and French (1997). The lodging portfolio was undervalued against 23 of the 48 industries and overvalued against none. The statistically significant results of all examinations support the lodging stock undervaluation issue. Especially, the service industry comparison negates the possibility of a mismatched sample problem in our main analyses with entire universe of non-lodging stocks and the modified industry. In addition to the service industry comparison, we made another comparison with real estate industry to deal with this same problem. The real estate industry comparison, as a part of the comparisons made with 48 different industries, was particularly pointed out because the real estate industry is known for possessing similar features of the lodging industry. The results again support the lodging stock undervaluation phenomenon when compared to the real estate. These two tests against service and real estate industry support that the lodging stock undervaluation issue was not due to its industry specific financial characteristics which may cause a mismatched sample problem. Based on our study results, we may want to bring up John Emery's statement at the beginning of this paper again; "lodging securities are undervalued and in an effort to rectify this problem, hotels need to deliver all the details regarding their financial and non-financial activities to investors and potential investors alike." However, the causes of the undervaluation phenomenon are

still unknown and it is an empirical question that we have to solve. Hopefully future research will identify the factors that lead to undervaluation of lodging stocks.

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INTERNATIONAL FOODSERVICE AND SANITATION MANAGEMENT CURRICULA TO ENHANCE STUDENT
SELF-EFFICACY

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ABSTRACT

Hospitality students hired by multinational hospitality corporations should have the theoretical knowledge, skills, and abilities to be successful in the global business setting. A curricula design for an international foodservice management and international sanitation management is presented. Sanitation protocol, international operations, and international leadership were areas of expertise needed to be successful in a global environment. Principle component analysis was used to determine the international competency dimensions in foodservice, sanitation management, and leadership. Regression analysis indicated that sanitation protocol had the most effect on sanitation benchmarks and leadership and international operations influenced strategic direction in the development of competitive strategies.

Key Words: foodservice, sanitation, leadership, strategies, operations

INTRODUCTION

The international knowledge and theoretical applications are important tools needed by individuals to survive in the international business arena. A way to gain this knowledge is through new or existing hospitality education courses that have an internationalized. These courses will enable these students to be successful in a global environment. The purpose of the study is to identify the critical subject matter expertise areas proposed curricula address the need to increasing international skills of U.S. hospitality education students.

LITERATURE REVIEW

International Curricula

Teare (1995) provides a comprehensive review education, training, and development, which emphasized the need for a competency base learning environment to enable the learner to adapt to an environment. Sigala and Baum (2003) emphasized that universities are facing challenges from the remote environment and must respond to these changes with an effective curricula to prepare students for the future. The relevant changes affecting curricula development include global competition, technological environment, socio-economic environment, faculty, and the student market. Furthermore, individuals must be creative and innovative relative to using the existing theoretical concepts to contribute to the mission of the multinational corporation. Moreover, Baum (1990) stated that hospitality education students must be multi-skilled to be creative, innovative, flexible, and adaptable to changes in the work environment. Thus, the student's development of skills, knowledge, and abilities to be effective in the international business sector is a continuous improvement process. The notion of collaborative learning through communication with others will provide understanding of the hospitality management precepts. Van Oord and Den Brok (2004) found that communications between the faculty and student was enhanced when the faculty members exhibited respect and a cooperative nature. The other favorable attributes were helpfulness, understanding, friendly, and leadership competencies in the classroom environment. Moreover, the student-faculty relationships were strengthening with the understanding of cultural differences and gender differences in learning styles and academic capabilities. The notion of knowledge management is important in an educational environment. The utilization of existing knowledge to build theoretical constructs is encouraging. Knowledge retention is critical for consistency in the decision-making process and to compare and evaluate new knowledge acquisition. The knowledge sharing of expertise and protocol will strengthen the MNE's organizational infrastructure and increase market share.

(D'Annunzio-Green, 1997; Torbiorn, 1997; Osman-Gani, 2000; Singala & Baum, 2003; and Hassan, 2000). The application of knowledge in an academic and business environment brings realism and relevance to the particular issue. In addition, the knowledge transfer will involve change in corporate culture, ways of thinking, cooperation, and coordination among corporate members (Nicholls, Rothstein, and Bourne, 2002; Enz and Siguaw, 2000; Codrington, 2004; and Selmer, 2002).

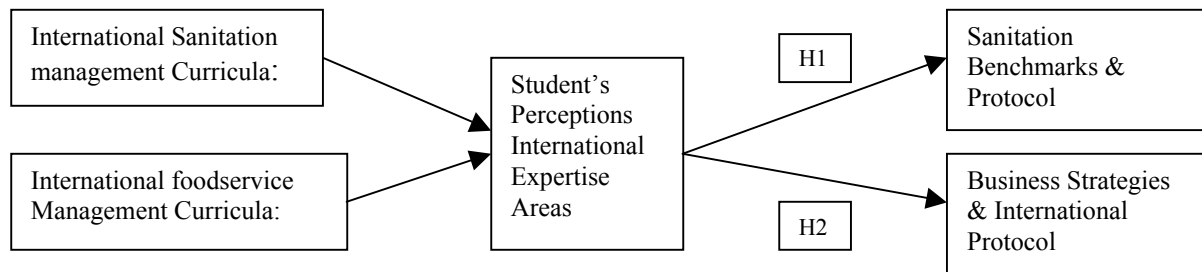
International Competency Development

There is an urgent need for multinational corporations to sustain and develop a cadre of hospitality staff and management to remain viable and competitive in a global business environment. International recruitment of competent expatriates will support the MNE's operative goals of transferring functional knowledge to new and seasoned indigenous workforce associates. D'Annunzio-Green (1997) contended that preparing the individual to work at all levels of management would enhance ones career development and promotion progression. The ability to work with other national cultures and develop an appreciation for different management competencies is an advantage. The level of position succession is dependent upon the corporation's concern to attract highly quality graduates to augment their labor pool. The notion of commitment on the part of the expatriate working in an international environment provided many training and development opportunities. The competencies of individuals contemplating foreign assignments are expected to have strong sense of financial knowledge to make a significant impact on the sustainability of their corporation's market share, profitability, and creation of wealth for their stakeholders (Kay & Moncarz, 2004). The attractive rewards, professional experiences, language training, and comfortable working environments were advantages of overseas positions. Moreover, according to Torbiorn (1997) the staffing of international operations may come to involve more strategic concerns leading to the development of sustained competitive business and corporate strategies. Chew and Horwitz (2004) found that individuals with strong values and are principle driven, usually prefer and thrive in a cohesive corporate culture, which encourages individual achievement and high organization commitment. This notion enhances the individuals' motivation to work in an international environment that is highly integrated, has strong core values, high performance standards, fosters high job retention, and high employee involvement.

Applied International Curricula Model

Figure 1.

The educational development of students will empower them to seek theoretical knowledge and practical applications to the critical issues confronting an international business enterprise.



Hypotheses

The research was based on the premise that the student's perceptions for the needed international course expertise levels will affect the need to understand international sanitation protocol and international competitive strategies. It is expected that a positive effect may occur on the necessity of having the appropriate international sanitation and foodservice management skills, knowledge, and abilities to be successful in a global business environment. Hypothesis H1: There is positive relationship between the student's perceptions of international sanitation management knowledge, skills, and abilities and sanitation benchmarks. Hypothesis H2: There is a positive relationship between the students' perceptions of international foodservice management expertise levels and competitive strategies to survive in a global business arena.

METHODOLOGY

Research Instrument

This survey will identify the managerial core job competency and proficiencies that an individual is expected to have prior to accepting a foreign assignment. The survey was divided into two parts. Part one asked the student to what extent they agreed or disagreed with the statements pertaining to the international sanitation core competencies. Part two

inquired about the international foodservice management core competencies needed by individuals entering the international hospitality arena.

Sampling and Data Collection

Convenience samples of hospitality education undergraduates and graduate students majoring in hotel and restaurant administration was selected. The undergraduate students in the introduction to the hospitality industry, cost control course, basic food preparation, procurement, and capstone courses were asked to participate in the study. A total of 188 survey instruments were collected and usable.

Data Analysis

In this study, frequencies were performed for all sanitation and foodservice management attributes. The mean rating and standard deviation was used to rate the respondent's perception level towards the areas of expertise needed to survive in a global business environment. With regard to reliability, Cronbach's Alpha was used to measure the reliability of the survey questions related to the attributes of international sanitation and foodservice management. Factor analysis, employing principal component analysis with Varimax rotation was performed. The resulting factors were used in a multiple linear regression analysis to evaluate the effect of sanitation protocol, international operations, and leader's relationship on (a) sanitation benchmarks and (b) competitive strategies.

RESULTS AND DISCUSSION

Sanitation and Foodservice Management Expertise

Table 1
Mean and Standard Deviation for Foodservice and Sanitation Management Principles

Foodservice Management Principles	N	Mean	Standard Deviation
Knowledge of competitive strategies .	188	4.0904	.88197
Sensitive to national cultures	188	4.1277	.83036
Mentoring and directing employees	188	4.0745	.83684
Successful communication process	188	4.2660	.93849
International operational principles	188	4.0372	.84884
International competitive methods	188	4.0479	.82918
International supply chain management	188	3.9628	.82973
Systems approach to designing products	188	3.8670	.87042
International service quality protocol	188	4.1011	.86858
International leadership principles	188	4.1809	.84604
Cronbach's Alpha for the above items: .9087			
Sanitation Management Principles	N	Mean	Standard Deviation
Knowledge of HACCP principles	188	4.1383	.83507
Knowledge of sanitation codes	188	4.1809	.85859
International sanitation benchmarks	188	4.0000	.79437
Employee training in sanitary practices	188	4.2553	.87675
Application of sanitary principles	188	4.2021	.88457
Protecting and safeguarding foods	188	4.1436	.93398
Foodborne pathogens in food products	188	4.0904	.86359
International sanitation standards	188	4.0426	.80659
Controls to preserve food quality	188	4.0798	.85219
International sanitary preventive measures	188	3.9681	.86466
Cronbach's Alpha for the above items: .9091			

The mean and standard deviation for each statement is presented in Table 1.0. The results indicated the student's agreement with the belief that those successful international managers may have these professional competencies. The

responses were derived based on a five-point Likert scale that independently ranked their level of disagreement and agreement with each of the international curricula needed to be successful, competitive, and retained in the international business arena.

Factor Analysis

Principle Component Analysis was used to determine the underlying grouped dimensions of needed theoretical principles to enable a student to be successful in the international business sector. In order to identify the underlying dimensions, factors were formed based on the Latent Root Criterion—Eigenvalue > 1.0, Total Variance Explained, Scree Plot, and Varimax (orthogonal) rotation using the SPSS 11.0 software. The Scree Test Criterion was used to show the latent roots (eigenvalues) of greater than 1.0 for the factors. Bartlett's test of sphericity was applied to test for inter-correlation, and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was used to ascertain that the variables were grouped properly. The chi-square (1988.364) of the variables was significant at $p < .000$ and the KMO value was .902, greater than 0.50, indicating the data was suitable for factor analysis. Three new factors: (a) Sanitation Benchmarks, (b) International Operations, and (c) Leader's Relationships were derived with eigenvalues of 8.073, 2.123, and 1.182 respectively (eigenvalues equal to or greater than one were extracted), and accounted for 63.211 percent of the total explained variance. The reliability (Cronbach's Alpha) for factors 1 through 3 were .9072, .8560, and .8444 respectively.

Table 2
Factor Analyses of Needed Theoretical International Management Principles

Educational Dimensions	Eigenvalues	Loadings	Communality
Factor 1: Sanitation Protocol	8.073		
Knowledge of HACCP principles		.535	.698
Knowledge of sanitation codes		.718	.737
Employee training in sanitary practices		.771	.769
Application of sanitary principles		.829	.782
Protecting and safeguarding foods		.804	.872
Foodborne pathogens in food products		.736	.746
International sanitation standards		.613	.651
Controls to preserve food quality		.727	.726
International sanitary preventive measures		.623	.748
Factor 2: International Operations	2.123		
International operational principles		.585	.721
International competitive methods		.803	.688
International supply chain management		.821	.688
Systems approach to design products		.692	.758
International service quality protocol		.568	.754
Factor 3: Leader's Relationships	1.182		
Sensitive to national cultures		.791	.689
Mentoring and directing employees		.758	.700
Successful communication process		.775	.881
International leadership principles		.580	.716
Factors	F1	F2	F3
Percentage of Variance Explained	44.84	11.796	6.56
Cronbach's Alpha	.9072	.8560	.8444
			Total
			63.211

Regression Analysis

A multiple linear regression analysis was used to assess the impact of international curricula on competitive strategies and sanitation benchmarks. The dependent variables are: (a) competitive strategies, and (b) sanitation benchmarks. The independent variables are: (a) sanitation protocol—factor one; (b) international operations—factor two; and (c) leader's relationships—factor three. The regression analysis provides insight as to which independent variable has the most influence on the use of competitive strategies and sanitation benchmarks in the international business environment.

Effects of International Sanitation Curricula on Sanitation Benchmarks

A linear regression analysis was used to assess the impact of international expertise areas on sanitation benchmarks. The factors previously developed from the international sanitation and foodservice management expertise areas were used as the independent variables in the regression. The multiple correlation coefficient (R) of the international expertise areas on sanitation benchmarks was 0.590, which indicates that there was a moderate correlation between the

factors of sanitation protocol, international operations and leader's relationship on sanitation benchmarks. The coefficient of determination R-squared for sanitation benchmarks was 0.348, which indicated that approximately 35 percent of the total variation of the sanitation-benchmarks variable was explained by the three international expertise factors. The F-ratio for the sanitation benchmarks was 32.693 ($p=0.0001$), which indicates that the regression model was meaningfully explaining the data. The standardized regression coefficient β (beta) was used to show which factors played an important role in explaining the impact of international expertise areas on sanitation benchmarks. The regression results indicated that three factors significantly contributed to the understanding of sanitation benchmarks. Sanitation protocol ($\beta=.426$), International Operations ($\beta=.316$), and Leader's Relationships ($\beta=.257$) were the most meaningful variables in order of magnitude; thus, hypothesis H1 (Hypothesis H1: There is positive relationship between the student's perceptions of international sanitation management knowledge, skills, and abilities and sanitation benchmarks) is supported. The results indicated that understanding of sanitation benchmarks was directly attributed to the individual's knowledge of sanitation protocol. If the manager and their respective employees understood HACCP principles, followed sanitation codes and standards, were aware of foodborne pathogens, trained their employees to safeguard and protect the food supply, and implemented controls and preventive measures, then complete understanding of the sanitation benchmarks would be achieved. Furthermore, the proactive attitude and the ability to safeguard foods from all forms of foodborne pathogens would protect the guest from any foodborne illness outbreaks. The welfare of the guest is foremost and the strict protocol and best practices must comply with international sanitation codes and procedures. Lastly, the sanitary conditions related to food production must be consistently improved to implement new changes and guidelines to protect food quality prior to service to the guests.

Effects of International Foodservice Curricula on Competitive Strategies

A linear regression analysis was used to assess the impact of international expertise areas on competitive strategies. The factors previously developed from the international sanitation and foodservice management expertise areas were used as the independent variables in the regression. The multiple correlation coefficient (R) of the international expertise areas on competitive strategies was 0.730, which indicates that there was a strong correlation between the factors of sanitation protocol, international operations and leader's relationship on competitive strategies. The coefficient of determination R-squared (R^2) for competitive strategies was 0.533, which indicated that approximately 53 percent of the total variation of the competitive strategies variable was explained by the three desirable international expertise factors. The F-ratio for the sanitation benchmarks was 70.092 ($p=0.0001$), which indicates that the regression model was meaningfully explaining the data. The standardized regression coefficient β (beta) was used to show which factors played an important role in explaining the impact of international expertise areas on competitive strategies. The regression results indicated that three factors significantly contributed to the understanding of competitive strategies. Leader's Relationships ($\beta=.529$), International Operations ($\beta=.459$), and Sanitation Protocol ($\beta=.207$) were the most meaningful variables in order of magnitude; thus, hypothesis H2 (Hypothesis H2: There is a positive relationship between the students' perceptions of international foodservice management expertise levels and competitive strategies to survive in a global business arena) is supported. The results indicated that understanding of competitive strategies was directly attributed to the individual's leadership competencies and knowledge of international operations. If the manager and their respective employees would use a systems approach when incorporating operational principles into their corporate structure, understands the supply chain management principles, provide effective leadership competencies, fostering of when mentoring and communicating with their constituencies, while being sensitive to national cultures, provides excellent service quality, then effective competitive strategies can be formulated to be successful in a global business arena. Moreover, leaders and their constituents must be open to new business protocol that will enable them to earn the respect and trust of those business partners in the international business sector.

CONCLUSIONS AND IMPLICATIONS

The study identified the sanitation and foodservice management expertise areas needed by individuals desiring to work in the international hospitality business sector. Sanitation protocol and leadership competencies were shown to have the most significant effect on sanitation benchmarks and competitive strategies respectively. The findings relative to sanitation benchmarks are most logical. The application of prevailing sanitary best practices and guiding principles will protect the guest's health and welfare. The implication is that leaders and their constituents must have a working knowledge of the use of HACCP in protecting and safeguarding the food supply and use proper food production techniques and temperatures when preparing entrées for their guests. The notion of going beyond the "reasonable care" rule must prevail in this regard. Critical limits and potential hazards that threaten the condition and quality of food must be consistently monitored and correction actions must be taken. Moreover, management and staff alike must embrace ethical practices and abiding to the sanitations codes and procedures. If a critical incident occurs, management and their constituents should be ready to take the appropriate action to safeguard the food supply and the well-being of their guests. Lastly, a continuous quality improvement program relative to sanitation management must be supported to upgrade the skills, knowledge, and abilities of all hospitality personnel to improve productivity and performance levels.

Similarly, the findings relative to the effectiveness of competitive strategies is dependent on leadership qualities and commitment to following international operation's protocol is encouraging. The sustained competitive strategies used when conducting business in a global environment is premised on the vision and creativity of the chief executive officer of the hospitality corporation. The ability to articulate their mission and vision of the firm to their constituents is a tremendous task. The implication is that leadership is everyone's responsibility in order to co-align scarce resources, human capital, financial resources, materials, equipment, and inventories to accomplish the mission of the hospitality firm. The competitive strategy to sustain the firm's position in the industry is no small task. This monumental task takes the persistence and dedication of committed individuals and self-regulated teams to meet the competitive issues facing the firm in a highly professional manner. Furthermore, the use of operational protocol unique to the international sector will enhance the success and sustainability of the firm's profitability.

The proposed international sanitation and foodservice management curricula should be contemplated when revising existing hospitality education courses. The areas of expertise will be useful to students when contemplating a foreign assignment with and international hospitality firm. The implication is that those faculty members are the mentors that will empower their students to broaden their educational capabilities and reach their fullest academic potential and use their knowledge when seeking professional excellence.

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EXAMINATION OF SELECTION CRITERIAL FOR CUSTOMERS VISITING COFFEE HOUSES:
A CASE STUDY OF A COOFFEE CHAIN HONG KONG

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ABSTRACT

Specialty coffee house has become an increasingly important segment of the foodservice industry in Hong Kong. The exponential growth of this segment generates keen competition. Without good understanding of their customers, these coffee houses may end up losing market share to competitors. 1,000 customers were interviewed and nine factors influencing customers' coffee house choice were identified. "Coffee quality and selection", "price and value" and "staff attitude and service" were the factors customers considered most important when selecting a coffee house. This research was supported by a research grant of The Hong Kong Polytechnic University.

Key Words: coffee house, selection, specialty coffee restaurant

INTRODUCTION

Over the past decade, specialty coffee house has become an increasingly important segment of the foodservice industry in Asia. The aggressive expansion of the American coffee chains such as Uncle Russ, Seattle Best Coffee, McCafe, and Starbucks Corporation has developed a whole new foodservice segment in Hong Kong and is expected to grow rapidly in the next few years (Chandler, 2000; Dellikan, 2000; Smith, 1999; Wu, 1999;). Coffee consumption in Hong Kong has gradually increased over the past 10 years (Hong Kong Census and Statistics Bureau, 2002) and this trend will continue with more chained and independent coffee houses opening in the city.

Most of these fast expanding international chains market their brand names in Hong Kong through the enforcement of operating themes and standards that closely emulate their respective models in the USA and elsewhere (Coffee shops, 1997; Full of beans, 1998; M. Lee, personal communication, March 25, 2001). In addition to these US-based chains, some of the most popular local chains and independent operations are adopting operating models similar to their American or European-based counterparts. The exponential growth of coffee houses generates keen competition. Without a good understanding of the market in which they operate, these coffee houses may eventually adopt a product-driven approach towards marketing, which will result in a poor image, brand failure, and a disappointing market share in the long-run. It is therefore of great importance that coffee house operators understand the criteria which customers consider in selecting the coffee house.

A number of previous studies have been conducted to identify important factors which affect customers' choice of different types of restaurants (Auty, 1992; Qu, 1997; Kivela, 1997). However, no one study is specifically looking at coffee house selection. Results of the study will be especially useful to existing or potential coffee house operators in understanding their customers and formulating operational and marketing strategies to respond to the needs and preferences of the markets. The purpose of this study is to identify factors that are important to customers in coffee house selection. The following are the objectives for the research: 1) to identify attributes which are important to customers when selecting a coffee house; 2) to identify the underlying factors and attributes which are important to customers when selecting a coffee house; 3) to describe the demographic and behavioral profiles of coffee house customers in Hong Kong; and 4) to provide suggestions and recommendations to coffee house operators in formulating appropriate operational and marketing strategies.

LITERATURE REVIEW

A number of previous studies have identified restaurant attributes perceived as important by customers. Lewis (1981) conducted a study to measure the impact of the various factors affecting restaurant choice intention and the results of

his study showed that “food quality” was the most important factor affecting the customer’s intention to visit any restaurant. Finkelstein (1989) suggested that the restaurateur considers the importance of atmosphere can be equal or even more important than food. Restaurants like Hard Rock Café and Planet Hollywood are examples of where diners can seek an exclusive atmosphere instead of a regular meal. Bitner (1992) suggested that the effect of physical environment on behaviors and the image of both customers and employees were essential for service industries. The physical environment plays different strategic roles in services marketing and management. It can aid or hinder the ability of customers and employees to carry out their activities. It may also help an organization to differentiate itself from its competitors. Auty (1992) concluded that while “food type” and “food quality” appeared to be the most important variables of restaurant choice, image and atmosphere were critical in the final choice between restaurants of the similar type. Riehle (1989) suggested that “food” and “service” were relatively important among different segments while the importance of other factors varied between different groups. Qu (1997) also found that “food and environment” were the most important factor in influencing customers’ choice of Chinese restaurants, followed by “service and courtesy”, “price and value”, “location”, and advertising and promotion”. Kivela (1997) also obtained very similar results in a survey to identify the main decision factors in selecting restaurants in Hong Kong. “Quality of food”, “type of food”, “cost of food”, and “ambience” were found to be the most important restaurant attributes. Dube (1994) proposed that the satisfaction with a meal in a restaurant resulted from several attributes including food quality, menu variety, atmosphere, food-quality consistency, and waiting time. Soriano’s study of customers of a Spanish restaurant (2003) identified 45 restaurant attributes to measure customers’ dining expectations and satisfactions. “Quality of food”, “price” and “professional staff” were the most critical attributes in affecting customers’ dining decisions.

Since most of the chained coffee houses only provide minimum services, the service style is almost comparable to fast food restaurants where the customers purchase and pickup their food and beverage orders at the cashier counter and then proceed to the sitting or dining area for their enjoyment. Therefore, it will be relevant to see if customers’ selection criteria for fast food restaurants are similar to selecting chained coffee houses. Results of Knutson’s (2000) study on important factors affecting university students’ choice among fast food restaurants showed that “cleanliness and friendliness”, “price”, “service speed”, “consistency in menu items”, and “menu variety” were the five most important factors. The drawback of Knutson’s study (2000) was that it only surveyed students of one university and the results may not be used to generalize about other non-student customers outside the university campus. However, the results of Knutson’s study (2000) on fast food restaurants can serve as a reference for the current study on the coffee house segment.

Based on previous literature on restaurant selection, expectations, and satisfaction, it is concluded that the restaurant attributes which customers deem important in influencing their choice and evaluation can be divided in the following aspects: food (quality, variety, and consistency), employee performance (service, courtesy, friendliness, professionalism, waiting time), environment (atmosphere, physical setting, location, ambience, and cleanliness), price (price, value, cost), and image (image, advertising, and promotions).

METHODOLOGY

This is an exploratory research study adopting a mixed approach by using both qualitative and quantitative methods in data collection and analysis. The first stage identified the attributes sought by customers when selecting coffee houses in Hong Kong for patronage. Parasuraman, Berry, and Zeithaml (1991) and Parasuraman, Zeithaml, and Berry (1988) developed an instrument for measuring restaurant service quality (SERVQUAL), but the scale could not be applied to every service setting without major adjustments to its dimensions and their attributes (Oyewole, 1999). For this reason, previous researchers have developed their own dimensions tailored to a specific sector of the foodservice industry (Auty, 1992; Oyewole, 1999). Since no previous study has been undertaken to address the service attributes specifically related to the specialty coffee house segment, a focus group interview was conducted to identify what customers want when patronizing specialty coffee houses in Hong Kong. Ten individuals with experience in patronizing specialty coffee houses in Hong Kong were invited to participate in the focus group. Since it is important to create a focus group representing the profiles of coffee house customers, it was purposely design to include a variety in the gender, age, education background, occupation, and frequency of visiting coffee houses. Findings extracted from the interviews and previous studies on restaurant attributes and restaurant customers’ selection criteria were used to develop the survey questionnaire for stage two of the study.

Stage two of the study was a quantitative study based on questionnaire interview. The design of the questionnaire was based on the results of the focus group interview. The questionnaire has three sections: Section 1 collects data about the coffee-drinking and coffee-house visiting behavior of the respondents; Section 2 collects information about the rating of the importance of 60 coffee house attributes perceived by customers (a five-point Likert scale is used, ranging from 1 = extremely unimportant to 5 = extremely important); and Section 3 is about customers’ socio-demographic information. The

preliminary instrument was evaluated for content validity by faculty from universities in Hong Kong and USA. A pilot test with a convenience sample of 50 coffee house customers was conducted.

Data collection for the second stage of the study was conducted between end of December 2002 and early January 2003. The data collection period included both weekdays and weekends. All possible dining periods, namely, breakfast, morning tea break, lunch, afternoon tea break, dinner, and after dinner were also covered. Based on the rule of thumb of 15 respondents to 1 variable suggested by Hair et al. (1998), a sample of 1,000 customers were selected from 25 specialty coffee houses that represent a leading American coffee house chain in Hong Kong. The coffee houses selected for the study were at different locations which include business, shopping, and residential in order to obtain a variety of respondents with a better representation of the customers of the coffee chain studied. A systematic sampling procedure was used to select 40 customers per day from each restaurant. Hence, it was judged that a reasonably representative sample of specialty coffee patrons was obtained. Questionnaires with excessive missing responses or incomplete responses were discarded, leaving 975 usable ones.

FINDINGS

Forty-two percent of the respondents were male and 58.0% were female. The majority of the respondents (41.4%) were between 25 and 35 years of age; 26.7% were 25 or below; 22% were between 36 and 45; 6.8% were between 46 and 55; and the remainder were above 55 years of age. In terms of their education level, over half of the respondents (52.4%) had university/college degree; 29.3% were secondary or high school graduates; 16.8% had postgraduate qualifications; and only 1.5% had education level of primary school or below. About a third of the respondents (30.5%) were professionals; 15.6% were office clerks; 14.8% were managers or administrators; 11.9% were students; and 10.1% were self-employed. Over 50% of the respondents had an average monthly household income of more than HK\$30,000 and about 20% have HK\$70,000 or more per household. Most of the respondents (38.9%) visited a coffee house 3 to 7 times a month. Majority of the respondents (44.5%) spent between HK\$30 to HK\$49.90 (US\$3.85 to US\$6.40) per visit. About 39% of the respondents spent less than HK\$30 (US\$3.85) and 16.4% spent HK\$50 (US\$6.41) or more. Majority of the respondents (47.1%) were visiting the coffee house alone; 42.7% were in parties of 2 persons; 9.6% were in parties of 3 to 4 persons; and the rest were in parties with more than 4 persons. Respondents also have similar purpose of visits during weekdays and weekends. About 42% of the respondents rated "relaxation" as their main reason for visiting the coffee house. The second most frequently rated reason was "daily routine" for weekdays and "social gathering" for weekends.

A factor analysis with principal components analysis and the Varimax rotation was used to reduce the coffee house attributes to a smaller number of dimensions. Based on Eigenvalues of 1 or above, and factor loadings of 0.4 or greater (Hair et al. 1998), the original 60 attributes were reduced to 41 since the attributes that were double loaded in more than one factor were reviewed and deleted. Nine factors were abstracted for interpretation and that explained 65% of the overall variance. Cronbach alpha coefficients for each of the nine factors (ranging from 0.63 to 0.94) indicated a fairly high internal consistency of the scale (Nunnally & Bernstein, 1994). Results of the factor analysis are shown in Table 1. "Coffee quality and selection" is the most important criteria for specialty coffee house selection, followed by "price and value and "Staff attitude and service". "Marketing activities and entertainment" and "other amenities" are factors that are relatively less important.

Table 1
Results of Factor Analysis on Specialty Coffee House Selection Criteria (n=975)

Factor and benefit statements	Factor Loadings	Mean	Eigenvalues	Variance (%)	Reliability
Factor 1: Staff attitude & service		4.36	12.85	18.9	0.94
Polite & courteous staff	0.80	4.53			
Well-trained & professional staff	0.77	4.44			
Perform service right the first time	0.77	4.42			
Helpful staff	0.77	4.50			
Give prompt service	0.77	4.39			
Friendly staff	0.75	4.51			
Responsive to requests	0.74	4.35			
Product knowledge	0.74	4.37			
Staff appearance	0.71	4.40			
Attentive to customer orders	0.69	4.30			
Offer individual attention	0.66	4.16			
Attentive to specific needs	0.60	3.97			

Factor 2: Coffee quality & selection		4.43	3.88	8.6	0.89
Aroma of coffee	0.83	4.46			
Taste of coffee	0.82	4.56			
Coffee with consistent quality	0.80	4.59			
Temperature of coffee	0.68	4.42			
Variety of coffee selection	0.58	4.14			
Factor 3: Atmosphere & comfort		3.90	2.22	6.8	0.78
Warm lighting	0.73	3.82			
Soft music	0.70	3.65			
Natural sunlight from outdoor	0.67	3.77			
Quiet atmosphere	0.66	4.02			
Adequate spacing between tables	0.63	4.26			
Factor 4: Menu & ordering efficiency		3.76	1.96	6.2	0.79
Clear signage for cashier and pickup areas	0.77	3.79			
Easy-to-read menu	0.76	3.92			
Attractive menu matches with store's image	0.69	3.57			
Factor 5: Price & value		4.40	1.53	5.5	0.89
Reasonable price with portion size	0.80	4.38			
Reasonable price with quality coffee	0.76	4.39			
Reasonable price with quality service	0.74	4.44			
Factor 6: Other food & drinks selection		3.69	1.36	5.2	0.76
Food variety	0.84	3.67			
Drinks variety (other than coffee)	0.79	3.65			
Special food items to pair with coffee	0.57	3.75			
Factor 7: Marketing activities & entertainment		3.44	1.18	4.8	0.70
Free trial of coffee & food items	0.75	3.19			
Sales promotion (coupons, discounts, etc.)	0.73	3.53			
Magazine selection	0.64	3.59			
Factor 8: Other amenities		2.66	1.11	4.7	0.63
A smoking area	0.66	2.67			
Availability of private room	0.61	2.62			
Availability of merchandise items	0.59	2.68			
Coffee bean display	0.52	3.09			
Factor 9: Socially responsible reputation		3.54	1.09	3.9	0.75
A socially responsible coffee house	0.83	3.29			
An environmentally friendly coffee house	0.79	3.79			

DISCUSSIONS AND IMPLICATIONS

In this current study, “coffee quality and selection”, “price and value” and “staff attitude and service” are the top three factors which customers consider important in selecting a coffee house. Results are consistent with prior studies as they also identified food type and quality, and service quality are the most important factors in selecting restaurants (Auty, 1992; Kivela, 1997; Riehle, 1989). Since specialty coffee houses specialize in selling coffee as the main product, it is obvious that for most customers, coffee quality and selection is the most important criterion for choosing a coffee house.

Although “price and value” is one of the top three important factors for customers in selecting coffee houses, this factor is not one of the top factors for most of the other restaurant selection criteria studies (e.g. Auty, 1992; Gregoire et al., 1995; Kivela, 1997; Riehle, 1989). The price factor may be more important for specialty coffee houses in Hong Kong during the time of the study as there were not many coffee house chains in Hong Kong and coffee culture has less than 10

years history. When customers do not have a lot of experience in choosing and evaluating certain products and services they purchase, they will use price as an evaluation or selection criterion. However, when the market is more sophisticated and more options are available for their selection, the importance of other factors such as environment, value-added service, etc. may be higher.

At the same time, service attitude, appearance, and responsiveness of staff are also important. Based on the service style of these chained coffee houses, customers mainly get to contact the staff at the point of purchase at the cashier. Then, they will pick up the purchased items from the service counter and proceed to the seating area for their own enjoyment. Opportunity to further interact with service staff is comparatively fewer than sit-down restaurants. However, customers still consider “staff” an important factor in coffee house selection. This means that it is important for these coffee houses to recruit employees with the right service attitude. In addition, standard operating procedures and adequate staff training are important to enhance the service quality of the employees.

“Atmosphere and comfort” is the fourth most important factor affecting customers’ choice of coffee house. The majority of the previous restaurant studies reports that “atmosphere”, “ambience”, and “comfort” are usually the top factors in affecting customers’ choice. Result of the current study indicates that “environment” is not as important as other factors such as “coffee”, “price and value”, and “staff attitude and service”. It was expected that “atmosphere and comfort” would be a more important factor based on the fact that the coffee house chain involved in this study had spent a lot of resources in creating a customer preferred environment as they believe that their customers patronize their coffee house for enjoyment and relaxation. Among all the environmental attributes, coffee house should focus on providing comfortable furniture with adequate spacing, comfortable temperature, and a quiet atmosphere to maximize customers’ enjoyment of the experience.

“Menu and ordering efficiency” is the fifth important factor. Usually, a customer will only have the opportunity to read the menu after they have decided to patronize a dine-in restaurant. Therefore menu may not be of importance in influencing customers’ selection of a restaurant. Based on the result of this study, clear and easy to read menu and attractive signage are one of the factors which customers will consider in selecting a coffee house. Since coffee houses specialize in selling a variety of specialty coffee and coffee drinks, non-regular customers may not have extensive knowledge of the different types of coffee. Therefore, a clear and easy to read menu and promotional signage will be something which customers rely on to decide if they will patronize the coffee house.

“Other food and drinks selection” is the sixth important factor affecting customers’ selection of coffee houses. Since coffee houses specialize in selling specialty coffee, customers may not be expecting a variety of other food and beverage in this type of food service establishment. Among the three different attributes in this factor, “availability of food to pair with coffee” is of higher importance compared to the variety of other food and beverage items. Again, the results indicate that customers visit the coffee houses mainly for the coffee. Appropriate food to pair with the coffee would enhance the enjoyment. However, coffee houses may still need to provide a limited selection of other food and beverage items for customers who may opt for variety.

“Socially responsible reputation” of the coffee house is one of the less important factors for customers in selecting coffee house. The level of importance of this factor is higher than “marketing activities and entertainment”. Restaurant operators may think that marketing communication strategies such as sales promotions and sampling may be more appealing to customers but in reality, customers are more concerned about the reputation and image of the company. From a marketing perspective, it may be more effective for coffee house not only to adopt environmentally friendly practices and products as an operational policy, but to emphasize these practices in their marketing communications. “Other amenities” is the least important factor among all the coffee house selection factors.

“Smoking area”, “availability of private rooms”, “availability of merchandise”, and “coffee bean display” were unimportant factors influencing the customers’ choice of coffee house. Customers are not specially looking for “extras” in the coffee house experience. The basics such as quality coffee, reasonable price and value for money, and quality staff are more important factors for them to pick a coffee house. However, some of the extras such as “magazines and newspapers” are standard features of a chained coffee house to customers. Food and beverage sampling and sales promotional offers such as coupons are value-added items which customers perceive as important. It is interesting that the majority of the chained coffee houses in Hong Kong have merchandise, such as packaged coffee beans, coffee powder, coffee mugs, etc. for sale. These merchandise items do not seem to be of importance to the customers as a selection criterion. For international chained coffee houses, customers who may be tourists from another country or city may consider these merchandises as souvenir items. However, to the regular customers, they may not be essential. Therefore, local coffee house chains may find it unnecessary to have a variety of merchandise since their main customer base is local residents of Hong Kong and a “no-frills” operation will be a key to success.

CONCLUSION AND RECOMMENDATION

To be successful in the coffee house business, an effective marketing mix is important. Results of the current and other restaurant selection studies, show the product itself is the key to success. Since coffee is the key product which the customers are purchasing in a coffee house, it is important to ensure a good variety of quality coffee is available. In addition, standardized operational procedure in brewing and serving the coffee is essential. With the advancement in technology, automated coffee brewer and coffee machines can help to ensure the consistent quality of the coffee. However, coffee shops cannot just rely on technology to provide quality coffee. The human element is also very important in controlling the process. Therefore, professional coffee training for staff is essential. Some of the international coffee house chains are already providing coffee master training for their staff in order to raise the quality standard of the coffee being served in the coffee house chain.

Service is part of the product of the whole coffee house experience even though the contact time between staff and customers is very short, customers still see staff playing an important role in enhancing their experience and it is one of the important decision factors. Therefore, it is important for the chained coffee house to invest in human resources by adopting appropriate employee selection processes, implementing employee training and re-training programs, and designing standard operating procedures to ensure service and product quality.

Customers are concerned about price, but not necessarily looking for low-priced and inexpensive products and services. Price for a cup of coffee sold in different establishments may vary but customers are willing to pay for a higher price as long as the product and service received are reasonably meeting their expectations. More experienced customers are looking for reasonable prices by evaluating the quality and quantity of the products and quality of service. If the coffee house can demonstrate to customers that it can provide a product with quality and reasonable quantity and service, which they find value for money, this will be something that can attract and retain customers. It is important for the coffee house to communicate this in its marketing communications such as advertisements, printed collaterals, signage, and display menus. As suggested by the result of this study, menu and signage could play a role in conveying the message about the product and services offered by the coffee house. Therefore, easy to read and attractive menu and clear signage may have to convey the image of the coffee house and its available products. With an aging population, easy to read menu and clear signage will be something coffee house need to consider when they have more mature customers in the future.

The majority of the respondents visit the coffee houses for relaxation and social occasions. It is therefore important to create a comfortable environment to facilitate and enhance these experiences. The results of this study indicate that comfortable furniture with adequate space, temperature, lighting, and soft background music help to attract the customer. All these are part of the total customer service and product experience. The expectations on the environment may change over time. Therefore, it is important for the coffee house to continuously monitor the change in preference of customers by constantly conducting research on customers' behavior and preferences. When customers grow more sophisticated, and with the increase in competition, customers may be looking for more than an excellent core product and service. A better environment and other value-added services will be important in the future.

LIMITATIONS AND FUTURE STUDIES

Although all possible sampling measures were used to increase the randomness of the selected samples for the study, the results still need to be interpreted with caution. Since this study was only conducted with customers of a particular coffee house chain, the results may only represent respondents who are frequent customers of this particular chain. Therefore, those who only patronize other coffee house chains might be left-out. Future studies can explore the characteristics of the different segments of coffee house customers based on their coffee house selection criteria. Specific demographic and behavioral characteristics of the segments can also be identified.

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DEGREE OF FRANCHISING AS A RISK AND FIRM PERFORMANCE FACTORS: EVIDENCE FROM THE
RESTAURANT INDUSTRY

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ABSTRACT

Offering franchises is an important business decision for many restaurant ventures. The purpose of this study is to organize financial information about fast-food and casual-dining restaurants in an effort to form relatively homogenous groups and clusters of restaurant firms. The objective of this study is to explore whether higher degree of franchising (DOF) results in lower risk (variance in cash flows). The findings showed that groups that tend to achieve significantly different performance levels (having higher levels of cash flows per share) are also characterized by differences across other variables, such as DOF. This empirical investigation about differences among restaurant firms supports the arguments of franchising scholars as to the advantages of franchising (Khan, 1999; Roh, 2002).

Key Words: Franchising, restaurant industry, risk, firm performance

INTRODUCTION

Offering franchises is an important business decision for many restaurant ventures. Franchising is an organizational form wherein one firm (the franchisor) grants a second (the franchisee) the right to market goods or services under the franchisor's brand name and to use its business practices (Stanworth and Curran, 1999) in exchange for a fixed (franchise) fee and ongoing royalty fee (Khan, 1999). While used in many industries, franchising is most common in settings where the nature of the product or service prevents firms from separating production and consumption (e.g., foodservice, lodging). Such firms must offer geographically dispersed outlets located near customers. Kaufmann and Dant (1998) stated that each of these outlets is managed by an employee manager (when outlet is company-owned) or as a franchise-owned outlet managed by an independent entrepreneur.

The costs and benefits of franchising is arguably one of the most researched topics related to franchising. In addition, the literature has attempted to answer the question of why restaurant firms franchise and investigated franchise-performance relationship via several theories such as capital scarcity and agency theory that are grounded in the finance and management fields. Yet it should be noted that the studies related to franchise-performance relationship yielded inconclusive results (Combs and Ketchen, 2003; Michael, 2002; Shane, 1996 among others).

One explanation for the lack of consensus is that, while research on franchising has been conducted for over thirty years (e.g., Oxenfeldt and Kelly, 1969), interest in that topic intensified dramatically in the 1990s. In their meta-analysis study Combs and Ketchen (2003) reported that three fourths of articles related to franchising were published during or after 1990. Further, the authors stated that since this is a relatively new endeavor, perhaps consensus should not be expected. Another explanation to the conflicting results can be that franchising is viewed as an important topic of research to scholars from several disciplines. It is a growth strategy to management researchers (e.g., Shane, 1996), a distribution channel to marketing researchers (e.g., Dant, Paswan and Kaufman, 1996), a capital structure issue to finance researchers (e.g., Norton, 1995), and a mode of organizing to economists (e.g., Lafontaine, 1992). Thus, different theoretical perspectives and methodologies exacerbate efforts to reach common understanding of this phenomenon (Combs and Ketchen, 2003; Hirsch, Friedman and Koza, 1990).

In response to the lack of consensus Combs, Ketchen, and Hoover (2004) adopted an alternative approach and looked at homogenous groups that exist between restaurant franchises and differences in performance by these groups. The authors used prevalent arguments related to managerial expertise, capital scarcity, monitoring costs/local market knowledge, and agency costs as a means of defining homogenous groups among restaurant firms. The present paper builds on and further extends this approach by using some financial variables to uncover homogenous groups among restaurant firms.

The purpose of this study is to organize financial information about fast-food and casual theme restaurants in an effort to form relatively homogenous groups and clusters of restaurant firms. These groups are derived based on firms' financial variables such as debt-to-equity ratio, cash flow per share, total sales, and sales from franchising to total sales ratio (degree of franchising). The objective of this study is to explore whether higher degree of franchising (hereafter DOF) results in lower risk (variance in cash flows). In order to achieve this objective the authors included the firms that have no franchised units in their business portfolio. Thus, in authors' view, DOF is expected to have a considerable influence on the variance in cash flows.

THEORITICAL BACKGROUND

Studies have examined the performance of franchisees *vis-à-vis* franchisors (e.g., Michael and Moore, 1995) or independent entrepreneurship (e.g., Williams, 1998). However, only four studies have considered the performance effects of the franchisor's decision to use franchising. Shane (1996) found that offering franchises boosts outlet growth and enhances the probability of survival among young franchisors. Although survival is a vital outcome, performance differences among surviving firms are also of great interest (Combs and Ketchen, 2003). Indirect evidence of a franchising–performance relationship was put forward by Michael (2002). He reported that firms that quickly began franchising gained market share, which in turn enhanced financial performance. Combs and Ketchen (1999) investigated, but did not find, a linear relationship between reliance on franchising and performance. Given the role of franchising in the economy and particularly in the restaurant industry, the lack of research establishing the franchising–performance relationship seems to present a gap in the literature (Combs et al., 2004).

Degree of Franchising and Risk

Hoover, Combs, and Ketchen (2003) maintained that for a long time hospitality firms chose franchising as their primary method for expansion. They indicated that franchised outlets account for large portions of sales in specialty-food retailing (55 percent), restaurants (46 percent), and lodging (39 percent) (Hoover et al., 2003; Michael, 1996). The mix of franchised and company-owned and operating units has some important implications for the restaurant industry.

In his study, Roh (2002) argued that in the restaurant industry the firm's choice of company owned and operated versus franchisee-operated units can affect the variability of cash flows. The author contended that the revenue generated through royalties at unit level causes lower variation in the cash flows for the franchisor company. Whereas, on the other hand a company-owned unit requires a fixed capital investment which increases firm's leverage and thus its risk. Therefore Roh (2002) maintained that restaurants which enter into franchise agreements are less risky than non-franchising companies. This view is supported by Martin (1988) who stated that by owning franchised units the franchisor sheds "risky" locations to franchisees and retains the stable locations as company-owned. Alongside, Lafontaine (1992) reported that franchised units have higher sales variability than the company owned units.

There are two reasons that emerged in the literature that explain the relationship between franchising and risk. First, because franchisees invest their own capital, they have a powerful financial incentive to excel. Company-owned outlets are managed by employees who confront weaker incentives than franchisees because their capital is not at stake (Minkler and Park, 1994). Passive investors may recognize this motivational disparity and demand a risk premium when investing in a firm dominated by company-owned outlets (Lafontaine, 1992). Second, passive investors rely on public information regarding firms' future intentions and abilities (Martin and Justis, 1993). Franchisees, in contrast, have private information regarding their own intentions and abilities, which reduces the cost of franchisee capital (Combs and Ketchen, 1999). In essence, franchisees can have greater confidence in themselves than passive investors can have in a firm, suggesting that the latter may demand the larger risk premium. Although some of the claims above do not explicitly refer to restaurant industry, the authors of the present study conjecture that firms which are primarily foodservice franchisors (versus owners and operators) should face a lower variance in their cash flows.

Gross Profit Margin

Although there are no hard and fast rules that define this variable in the context of franchising, it is common knowledge that a higher DOF should lead to higher (gross) profit margins. This phenomenon can be explained by the fact that firms that generate most of their sales from franchising will have lower cost of goods sold since the revenues received in form of royalties have no direct cost. Whereas, on the other hand, restaurant sales (from company-owned units) have cost of goods sold item attached to it. Therefore, it is assumed that firms with higher percentage of sales from franchising will have higher profit margins.

Degree of Operating Leverage

Asset structure is one of the major differences between firms which are heavily franchised or company-owned.

Huo and Kwansa (1994) stated that hospitality firms have the common feature of being fixed asset intensive and highly leveraged. Operating leverage is defined as the effect of fixed costs on the variability of earnings before interest and taxes (EBIT) (Huo and Kwansa, 1994; Ross, Westerfield, and Jaffe, 2003). In other words, it is the responsiveness of the firm's EBIT to fluctuations in sales. Degree of operating leverage (DOL) can be expressed as:

$$\text{DOL} = \text{Revenue before fixed costs} / \text{EBIT} \text{ or } \text{DOL} = S - VC / S - VC - FC$$

where, EBIT represents earnings before interest and taxes, S represents sales, VC is variable costs, and FC is fixed cost. The greater the firm's degree of operating leverage, the more its profits will vary with a given percentage change in sales (Huo and Kwansa, 1994). Financial management field maintains that a high degree of operating leverage, *ceteris paribus*, implies that a relatively small change in sales results in a large change in Return on Equity (ROE) (Brigham and Gapenski, 1996). Thus, operating leverage is one of the main components of business risk that impacts the company. Just like with the gross profit margin, it is expected that the firms with the higher DOF will have lower DOL.

Debt-to-Equity Ratio

Firms with the higher DOF are likely to use less debt since they do not invest any money in the business unit itself (Roh, 2002). Whereas, on the other hand, a company-owned unit requires a fixed capital investment which increases parent firm's leverage. In addition, given the fact that the restaurant industry seems to rely heavily on growth in number of units rather than on growth in same-store-sales as its growth vehicle (Sen, 1998; Chathoth, 2002), firms are expected to rely principally either on franchising, internally generated funds or on debt issuance to support their growth strategies. Hence, it is postulated that the firms with higher DOF will have lower Debt-to-Equity Ratio.

Cash Flow per Share (CFPS)

Utilization of cash flows by Chathoth (2002) and Roh (2002) as opposed to traditional accounting measures such as Return on Assets (ROA) was one of the important innovations in hospitality literature which was in line with Olsen et al.'s (1998) argument that cash flow is the best measure in communicating firm performance to its shareholders. Therefore, the present study adopts CFPS as a measure of performance. It should be noted that the relationship between the DOF and firm performance is not clearly established in the body of the literature. However, based on the underlying assumption that royalty fee enables the firms to achieve healthy margins the authors of this paper expect that there is a positive relationship between the DOF and firm performance. Thus, *ceteris paribus*, the higher the percentage of sales from franchising the higher the cash flow per share.

Variance in Cash Flow per Share (CFPS)

Risk has been defined by finance scholars as the variance in the return of an investment (e.g. Lintner, 1965; Sharpe, 1964). As argued above, the proxy utilized in this study to measure performance - i.e. the performance of an investment - is the Cash Flow per Share (CFPS). Thus, following the notion that risk can be captured by the variance of the investment performance measure, we will use the variance in cash flow per share to assess the degree of risk. Based upon the assumption that franchising reduces the risk as measured by the variance in cash flow (Roh, 2002), the authors expect that there is a negative relationship between the DOF and the variance in cash flow per share. That is, the higher the DOF, the lower the variance in cash flow per share.

System Size

System size is one of the three variables (other than firm age and growth rate) that were generally examined as part of resource scarcity argument (Combs and Ketchen, 2003; Oxenfeldt and Kelly, 1969). It is believed that when firms are young, small, and growing, resource scarcities are presumed to be greatest and the use of franchising extensive. Building on that claim, Combs and Ketchen (2003) tested the hypothesis that system size is negatively related to the use of franchising. However, contrary to authors' expectations, *r* for system size was positive and significant (*r* = .32; *p* < .05).

Firm size was measured in several different ways in the restaurant industry. Roh (2002) used total assets as a proxy for firm size. Gu and Kim (2003) adopted total capitalization as firm size, whereas Combs et al. (2004) used total number of units as firm size. The present paper uses total sales as a measure of system size. It is authors' belief that total sales is an adequate indicator of economies of scale among the restaurant firms. Heretofore, the present paper argues that, *ceteris paribus*, the larger firms should have a higher DOF than the smaller firms. Consequently, the authors of the present paper expect that larger firms should be classified into the cluster of the firms who have a high DOF.

METHODOLOGY

Sample and Data

The effect of industry belonging on firm performance and risk has been studied widely by strategy scholars (Schmalensee, 1985; Rumelt, 1991; McGahan and Porter, 1997). While the question related to whether performance is

essentially driven by industry or firm factors is still not resolved, some evidence shows that variance in performance is tightly linked to the business segment and industry specific aspects (McGahan and Porter, 1997). In this study, we focused on the restaurant industry since it is widely recognized as an industry relying heavily on franchising as a growth vehicle. In addition, the sample is limited to the fast-food and casual dining restaurants in order to control for segment effect. The sample is restricted to publicly traded firms to facilitate the collection of reliable data. In addition, we restricted the sample to firms that have been traded continuously between 1998 and 2002. The five year period is expected to cover an entire growth cycle, thus controlling for extraordinary periods (Choi, 1999). The DOF measure was collected via SEC filings, while the COMPUSTAT database provided all other variable measures. Through COMPUSTAT, 37 appropriate firms representing casual dining and fast food segments were identified. Based on the Chi-square test of independence, no significant differences were found between the two business segments in terms of the variables included in this study ($\chi^2 = .10$).

Variables

The selection of variables needs to be theory driven since it is undeniably the most important step in cluster analysis (Hair et al., 1998). Accordingly, and based upon the literature reviewed above, an initial cluster analysis was performed utilizing all 7 variables. However, due to non-significant results, 3 variables were removed from the final cluster analysis, namely: gross profit margin, variance in cash flow, and DOL. Yet, the variance in cash flow and DOL variables were still utilized for descriptive purposes of the final clusters. Indeed, the high correlation of these two variables with the other four variables used in the clustering procedure could have lowered their significance during the clustering process. In addition, these two variables remained of practical significance for descriptive purposes. Consequently, CFPS, DOF, debt-to-equity and total sales were utilized for the cluster analysis, and variance in cash flow per share and DOL were used in the descriptive analysis of the clusters.

Data Analysis

To uncover the relationship between the DOF and operating risk, we pursued the clustering procedures presented by Hair et al. (1998). After having standardized the variables, we followed the two step procedures; first a hierarchical cluster analysis, followed by a K-means cluster analysis. The first analysis uses the hierarchical cluster method in order to define the number of clusters to analyze and to define their means. Those means are then used as cluster seeds in the second stage. The hierarchical procedure used the furthest neighbor method in SPSS software and the squared Euclidean distance as similarity measurement method. For this step, a random sample of 19 firms (which represents approximately 50% of the total sample) has been computed. The number of clusters was chosen based on the analysis of the agglomeration coefficient changes and on the dendrogram. Given the large increases in agglomeration coefficient between 1 to 2 clusters, and after examining the representation of the dendrogram, a two cluster solution was deemed as most relevant for further analysis. Additionally, the solution presented a relatively balanced number of cases in each cluster (21 vs. 16).

The second analysis uses a non-hierarchical method, the K-means cluster procedure in SPSS, to adjust the results of the first analysis. As mentioned earlier, the centers used for the two-cluster solution were based on the means computed in the first step. Furthermore, at this stage the entire sample of 37 was employed. As for the hierarchical cluster results, the analysis yielded relatively equally sized clusters. The stability and consistency between the two analyses, and the relevance of the profiles, confirmed the theoretical and practical acceptance of the two cluster model. As suggested by Combs et al. (2004) and Dant and Gundlach (1999), multivariate and univariate ANOVAs' can then test the internal validity of the clusters.

RESULTS

As discussed above, the hierarchical cluster analysis suggested a two-cluster solution. We thus utilized the seeds of the two-cluster solution for the k-means clustering procedure. We then examined the validity of the clusters through the univariate and multivariate tests presented in Table 1.

Table 1
Test of Internal Validity of the Clusters

		F value	Sig.	Effect size (η^2)	Observed Power
Multivariate	Model	21.097	.000	.725	1.000
Univariate	Cash flow per share	47.797	.000	.577	1.000
	Degree of franchising	2.831	.101	.075	.373
	Debt-to-equity	11.612	.002	.249	.912
	Total sales	6.270	.017	.152	.683

Computed using alpha = .05

The internal validity of the two-cluster solution is strongly supported as the MANOVA model explains 72.5% of the variance in the variables (effect size = .725, $p < .001$). The effect size (η^2) is a generalization of r^2 and multiple R^2 with the same interpretation. Following the multivariate analysis, and given the significant MANOVA result, univariate analyses of variance are appropriate to determine the sources of groups' differences. The only variable not significant at $p < .05$ is the DOF; it is however kept for further analysis for practical purposes. Indeed, the significance level of .101 is deemed sufficient in the context of the cluster analysis. Interestingly, the cash flow per share is the most significant variable that distinguishes between the two groups ($p < .001$, effect size = .577).

The clustering variables means are presented in Table 2 according to their group belonging. The clusters are mainly characterized by their level of CFPS as stated above. Thus, we label the clusters based upon their level of cash flow per share; the first cluster being labeled "high performers" and the second "low performers". The high performers' group presents a higher DOF, a lower debt-to-equity ratio and much larger sales volume than the low performers' group.

Table 2
Cluster Descriptions (means)

Clustering variables	Cash flow per share (\$)	Degree of franchising	Debt-to-equity	Total sales (in millions \$)
High performers	1.995	20.93%	0.688	2,301.43
Low performers	0.831	9.14%	0.812	280.41

The cluster being identified, we then focused our attention to the risk measures. Table 3 shows the means and significance of the variance in cash flow per share and DOL variables in terms of their cluster belonging. While none of these two variable is significant at $\alpha = .10$, the variance in cash flow per share still remains interesting for practical interpretation. Indeed, the high performers' group tends to bear less risk than its counterpart. This lends support to the commonly accepted notion that large and highly franchised firms with low indebtedness tend to be less risky investments than the other firms.

Table 3
Risk Measures (means and significance)

Risk variables	Variance in cash flow per share	Degree of operating leverage
High performers	0.307	1.888
Low performers	0.635	2.425
Sig.	.150	.413

Due to the nature of our sample, we also tested for differences among clusters that could be caused by business segment differences. Table 4 presents the observed frequency table used to test independence between clusters and segments. The Chi-square test shows that the cluster analysis provides a grouping model that is independent of the business segment at $p < .10$. Thus, we conclude that the business segment has no significant impact on the model developed.

Table 4
Test of Independence between Clusters and Segments

	High performers	Low performers	Total
Fast-food restaurants	9	6	15
Casual-dining restaurants	7	15	22
Total	16	21	37

F-value: 2.886, P-value: .089. Continuity correction used for 2x2 design

DISCUSSIONS AND DIRECTION FOR RESEARCH

The results of this study provide important support and contribution to the literature pertaining to the franchising-performance relationship. Indeed, groups that tend to achieve significantly different performance levels are also characterized by differences across other variables, such as the DOF. This empirical investigation about differences among restaurant firms supports the arguments that have been put forward by franchising scholars as to the advantages of franchising (Khan, 1999; Roh, 2002). More specifically, the results support 6 out of the 7 expected relationships.

Franchising as a Grouping Variable

As suggested by previous research (Hoover et al., 2003; Roh, 2002; Lafontaine, 1992), the DOF is a meaningful clustering variable, as is the performance metric. The two clusters resulting from the analysis show high differences in performance between those restaurant companies that collect a prominent portion of their sales from franchising units. As a consequence, the clusters were named according to the performance criteria, but could also be seen as highly franchised versus highly owned and operated groups. This tendency is in congruence with the previous studies that provided, directly or indirectly, some evidence related to franchising-performance relationship (Michael, 2002; Shane, 1996). However, in light of the present results of this investigation, some additional variables deem some further consideration when looking into this complex relationship. Indeed, as Combs and Ketchen (1999) acknowledged, the franchising-performance relationship may not be simply linear as many additional factors appear to intervene.

Franchising and Risk

One of the major factors affecting performance is undoubtedly the risk associated with the results of the firm. As argued by Roh (2002), the use of franchising as an expansion strategy can affect the variability of cash flows since the revenue generated via royalties is less at risk, since it is of a less variable nature. The expected relationships between the DOF and risk measures are reasonably supported by the results of the cluster analysis and subsequent descriptive analysis. As anticipated, the firms with higher DOF tend to have lower degree of operating leverage and lower variance in cash flow per share. While none of the risk variables were significant in terms of difference, their means leaned toward confirming the expected relationship.

Franchising and Performance

As mentioned above, the franchising-performance relationship is confirmed by the results, as highly franchised firms also tend to achieve higher cash flow per share. While the gross profit margin variable was not significant, and thus removed from the cluster analysis, the expected association is still tenable; a high DOF tends to be related to a high level of cash flow per share.

Capital Structure and Firm Size

While some researchers have argued that the scarcity of capital was a prime motivator for franchising (Combs and Ketchen, 1999, 2003), and that small firms were less able to find capital for expansion, the results of the present study seem to shed some light into another kind of relationship. Indeed, as noted by Roh (2002), firms with higher DOF are larger corporations (i.e. have higher total sales) and make less use of debt financing (lower debt-to-equity ratio). Thus, given that high total sales, low debt-to-equity ratio and high DOF characterize the first cluster, it can be argued that the level of debt is more of a function of the ability of firms to successfully grow through franchising rather than capital scarcity. Accordingly, the causal nature of the relationship between the capital structure and franchising may be of an opposite sort than the one suggested by the capital scarcity school of thought; the ability to franchise may well cause less need to fund growth through the use of debt.

Concluding Thoughts and Suggestions for Future Research

The profiles of the clusters identified in this study provide meaningful insights to both practitioners and academics. As the literature on franchising has stressed for some time, restaurant chains that can expand through franchising tend to perform better than others, and are likely to carry less risk in terms of variance in cash flow. The potential reasons that could explain why some restaurant firms can successfully grow via franchising while others cannot is another field of investigation for the near future.

According to some authors (Khan, 1999; Combs and Ketchen, 1999, 2003), the specific managerial knowledge, the brand strength or the proven operating system, to name a few, could be part of those extra variables that could be considered in further research. While the same authors argued that capital scarcity was a prime factor in deciding to franchise, the present study shows that a different relationship may exist. As discussed above, the decision to rely on external financing may be more a result of the capabilities of a chain to effectively attract franchisees. As a consequence, the brand strength and track record of proven operating system variables should receive more consideration for further inquiry. Certainly, as a restaurant chain has successfully proven its concept and brand potency, franchisee should logically see greater opportunity available at a lower risk, thus being more willing to invest its own capital. While the contention about capital scarcity seems logical as it relates to small firms in their early stages of development, it most likely remains as more of an intention than an actual realization. Although some degree of risk can be transferred to the franchisee, the concept of the franchisor, its operating system and its brand still need to prove their value to the protective entrepreneurs to convince to enter into franchising agreements.

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PROBLEMS ENCOUNTERED, REPORTED AND RESOLVED: THE EXPERIENCES OF LOYALTY PROGRAM MEMBERS

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ABSTRACT

Despite the prevalence of loyalty programs in the hospitality industry, little is known about consumer behaviors associated with loyalty program membership. This study is one of the first attempts to examine the behaviors of loyalty program members in the service failure context. Our results show that the customers with the most prestigious membership status encounter the least problems, but when they do encounter problems, they are most likely to report the problems to the firms. The customers with the most prestigious membership status are also the least satisfied customers with the problem resolution.

Key Words: Loyalty programs, service recovery, problem encounter, problem reporting, problem resolution

INTRODUCTION

Organizations have long sought to reward repeat consumers with extra benefits and discounted prices (Bolton, Kannan, & Bramlett, 2000). The hospitality industry is among the first industries where reward programs gained momentum (Palmer, McMahon-Beattie, & Beggs, 2000). This paper is one of the first attempts to examine customers' service experience under the participation of loyalty programs, in particular, loyalty program members' experiences associated with problems encountered, problems reported and satisfaction with the problem resolution.

THEORETICAL BACKGROUND

Loyalty Programs and Consumer Behavior

Many empirical studies suggest that the reward programs promote repeated purchases but are ineffective in enhancing customers' psychological brand attachment (Divett, Crittenden, & Henderson, 2003). However, empirical evidence also suggests that customer commitment based on shared value and identity has a positive impact on brand loyalty while the customer commitment based on switching costs and dependence have only mixed effect on brand loyalty (Fullerton, 2003).

Some researchers assert that loyalty programs are beyond their initial purposes of inducing frequent patronage (Hallberg, 2004). In fact, researchers (e.g., Duff, 2003) even suggest that a loyalty program is not just a marketing program, it is a business strategy whereby brand building starts from within the service firms.

Frequent Customers and Problem Experience

A TARP's study reports that 50% of consumers and 75% of business customers who have problems complain to service organizations (Goodman, Ward, & Yanovsky, 1998). Speer (1996) believes that complainers are likely to be frequent shoppers. Empirical evidence suggests that emotionally-bonded customers demonstrate a sharp decrease in their post-recovery attitude as they feel "betrayed" by the service firms while customers with lower level of emotional bonding are more "forgiving" when problems are effectively resolved (Mattila, 2004).

Based on the preceding discussion, the following hypotheses are developed:

- Hypothesis 1:* Members of a loyalty program encounter less service problems than non-members.
- Hypothesis 2:* Membership status is negatively related to the likelihood for members to encounter service problems.
- Hypothesis 3:* More than 50% of customers who encounter problems complain to service organizations.
- Hypothesis 4:* Members of a loyalty program have a higher propensity to report problems to the service organization than non-members.
- Hypothesis 5:* Membership status is positively related to the members' propensity to report problems to the service organization.

Hypothesis 6: Members of a loyalty program are less satisfied with the problem resolution than non-members.

Hypothesis 7: Membership status is negatively related to the members' satisfaction with the problem resolution.

RESEARCH METHOD

Database

The study is conducted using cross-sectional, time series data made available to us by a renowned hotel chain. The database contains customer satisfaction data collected in a 12-month time frame through mail and electronic surveys. The database contains responses from a total of 271,061 customers who had stayed at least once in one of the properties under the flagship of this hotel chain.

Measures

Independent Variables. The three tiers of membership status originate from the source company of the database were the independent variables measured in this study. Figure 1 illustrates the membership classification. Independent variables were measured as follows: (1) First tier: *Participation in loyalty program* was a dummy variable coded 0 if a respondent is a member of the loyalty program, 1 if a respondent is not. (2) Second tier: *Elite membership status* was a dummy variable coded 0 if a respondent is an "elite member", 2 if a respondent is a "regular member". "Regular members" are defined as the members who are M* (brand name of the hotel chain under the study) rewards membership card holders and "elite members" refer to the club membership card holders. (3) Third tier: The "elite member" group in the second tier was further classified into three subgroups based on the *prestige level*, namely, "high-level elite members", "mid-level elite members" and "low-level elite members" with "high-level elite members" the most prestigious (recognized with the most rewards). The three levels of elite membership are referred as platinum membership, gold membership and silver membership respectively in the original database.

FIGURE 1
Membership Classification



Dependent Variables. Three dependent variables were measured. *Problems encountered* was a dichotomous variable scored 0 if the respondent encountered a problem and 1 if the respondent did not encounter a problem during his stay. *Problem reporting activity* was a dichotomous variable with 0 as "problem not reported" and 1 as "problem reported". *Problem resolution* was measured on a five-point scale reflecting respondents' ratings of the problem resolution against their expectations with 5 as "much better than expected" and 1 as "much worse than expected".

ANALYSIS AND RESULTS

Two sets of analyses were performed to test whether *problems encountered* differ across the various groups (*Hypothesis 1* and *Hypothesis 2*). First, data were cross-tabulated to reveal the frequency distributions of the subjects with a problem encounter during their stay. For the second test, a chi-square analysis was performed to identify any significant differences in *problems encountered* among the groups of different membership status. Similarly, cross-tabulations and a chi-square analysis were performed to measure the differences in *problem reporting* across the various groups (*Hypothesis 3*, *Hypothesis 4* and *Hypothesis 5*). Mean scores were calculated and a series of *t*-tests were performed to measure the differences in ratings on *problem resolution* across the various groups (*Hypothesis 6* and *Hypothesis 7*).

Problem Experience (Members vs. Non-members)

Table 1 summarizes the results of the frequency distribution, chi-square analysis, and *t*-test for the comparison between members and non-members. Compared with non-members (25.0%), a lower percentage (23.8%) of members indicated *problems encountered* during their stay. The chi-square test reveals that the difference is significant ($\chi^2 = 36.68$, 1 df, $p < 0.001$), *Hypothesis 1* was supported. The significant difference in *problem reporting* between members and non-members also emerged ($\chi^2 = 85.68$, 1 df, $p < 0.001$), suggesting that members (71.1%) have a higher propensity to report problems than non-members (67.1%). *Hypothesis 4* was supported. The results of *t*-test reveal that members (mean=2.65) rated significantly lower on *problem resolution* than members (mean=2.75, $t = -7.241$, $p < 0.001$). *Hypothesis 6* was supported.

Table 1
Problem Experience (Members vs. Non-members)

Problem Experience	Loyalty Membership Status	
	Members	Non-members
Problems encountered	48,884 (23.8%)	16,429 (25.0%)
$\chi^2 = 36.68$, 1 df, $p < 0.001$		
Problem reporting	33,400 (71.1%)	10,122 (67.1%)
$\chi^2 = 85.68$, 1 df, $p < 0.001$		
Problem resolution	2.65	2.75
$T = -7.241$, $p < 0.001$		

Problem Experience (Elite Members vs. Regular Members)

As shown in Table 2, the difference in *problems encountered* is significant between elite members and regular members ($\chi^2 = 119.80$, 1 df, $p < 0.001$). More regular members (24.8%) indicated a problem encounter during their stay than elite members (22.7%). Therefore, *Hypothesis 2* was supported in the comparison between elite members and regular members. Conversely, more elite members (71.5%) reported problems than the regular members (70.7%). However, the difference in *problem reporting* between elite members and regular members is not statistically significant. Similar to the pattern found in the comparison between members and non-members, elite members (mean=2.62) rated significantly lower on problem resolution than regular members (mean=2.68, $t = -4.734$, $p < 0.001$). Therefore, *Hypothesis 7* was supported in the comparison between elite members and regular members.

Table 2
Problem Experience (Elite Members vs. Regular Members)

Problem Experience	Loyalty Membership Status	
	Elite Members	Regular members
Problems encountered	21,988 (22.7%)	26,916 (24.8%)
$\chi^2 = 119.80$, 1 df, $p < 0.001$		
Problem reporting	15,160 (71.5%)	18,256 (70.7%)
$\chi^2 = 2.900$, 1 df, $p = 0.089$		
Problem resolution	2.62	2.68
$T = -4.734$, $p < 0.001$		

Problem Experience (among High, Mid, and Low-Level Elite Members)

As Table 3 shows, the lower the elite level, the more likely for an elite member to encounter a problem during his stay ($\chi^2 = 20.060$, 2 df, $p < 0.001$). This result is consistent with the findings in the two earlier tiers of comparisons (members vs. non-members and elite members vs. regular members) and *Hypothesis 2* was supported in this tier of comparison as well. The pattern for *problem reporting* is in a reverse order. The higher the elite level, the more likely for an elite member to report problems ($\chi^2 = 14.167$, 2 df, $p < 0.001$). *Hypothesis 5* was supported. A series of *t*-tests on the *problem resolution* scale confirmed the presence of a significant difference among the three different elite-level groups ($t = 2.895$, $p < 0.001$). Subjects in the high-level elite group (mean=2.57) rated significantly lower on problem resolution than the subjects in the low-level elite group (mean=2.64). This result confirms the pattern found in the first two tiers of comparisons between members and non-members, and elite members and regular members and the *Hypothesis 7* was

supported in this tier of comparison as well. The results show that on average 70% of the respondents, regardless of their membership status, reported to the service organization about the problems they encountered during their stay. *Hypothesis 3 was supported.*

Table 3
Problem Experience (among High, Mid, and Low Level Elite Members)

Problem Experience	High-level elite	Mid-level elite	Low-level elite
Problems encountered	15,867 (23.1%)	2,627 (21.5%)	3,494 (22.0%)
$\chi^2 = 20.060$, 2 df, $p < 0.000$			
Problem reporting	10,824 (70.8%)	1,845 (72.5%)	2,491 (73.8%)
$\chi^2 = 14.167$, 2 df, $p < 0.001$			
Problem resolution	2.64 ^a	2.60	2.57 ^a
a: Significant at $t = 2.64$, $p < 0.001$			

SUMMARY

Our results throughout the three-tier comparisons display a consistent pattern on problems encountered: As a customer's loyalty membership status increases, his likelihood to encounter a problem with the service organization decreases. A consistent pattern for problem reporting also emerged across all groups. On average about 70% of the customers who encountered problems would complain to service organizations. As the membership status increases, customers demonstrate higher propensity to report problems but are less satisfied with the problem resolution.

MANAGERIAL IMPLICATIONS

Our findings suggest that the most preferred customers encounter the least problems but have the highest propensity to report problems. It implies when firms hear problems from their preferred customers, it is possible that when similar problems are also plaguing their larger base of regular customers who are less inclined to voice their dissatisfactions. Firms can benefit from their preferred customers' propensity to report problems and tap on the rich feedback for an effective problem resolution.

Our results also suggest that the most preferred customers are the least satisfied customers with the problem resolution. Given this finding, firms should reassess their existing service recovery processes in terms of its fairness and appropriateness for the preferred customers. Preferred customers' satisfaction with problem resolution may be improved through greater employee empowerment for handling complaints from preferred customers and documentation of the service failure in customers' profile to prevent future failures.

Our findings also suggest that members are not necessarily satisfied customers. Just because they are hooked by rewards doesn't mean they will stay with the service organization, especially in that many customers are holding memberships with multiple companies including a service organization's competitors. A "Total Loyalty Management" approach should be taken to seize every opportunity created by the loyalty program to enhance customers' service experiences with an organization.

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RELATIONSHIP OF RESTAURANT INSPECTION SCORES, CERTIFICATION, AND FOOD SAFETY
KNOWLEDGE IN TIPPECANOE COUNTY, INDIANA

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ABSTRACT

Indiana foodservice managers were surveyed to determine relationships between manager certification in safe food handling, knowledge, and health inspection scores. The Indiana data suggested that there were some differences in the way certified and non-certified food handlers rated the risks associated with various actions. Certified managers demonstrated a greater knowledge on the food safety questions, but certification was not significantly associated with better scores on health inspection reports. Such findings might suggest that greater knowledge does not necessarily translate into better health inspection scores for this highly complex issue.

Key Words: foodservice, food safety, health inspection, certification

INTRODUCTION

Americans are eating more meals away from home than ever before. Over 54 billion meals are served at 844,000 commercial establishments by 12 million employees in the United States each year (Jones, Pavlin, LaFleur, Ingram, & Schaffner, 2004). This increase in meals consumed away from home has placed even greater importance on the number one issue facing the food industry today: food safety (Almanza, Nelson, & Ming-Lun, 2003).

According to the Centers for Disease Control and Prevention (CDC), there are an estimated 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths due to foodborne diseases each year (Mead et al., 2000). Of the outbreaks that can be traced back to the source, 79% occurred in commercial or noncommercial foodservice establishments (Barrett, Penner, Blakeslee, & Sauer, 1998). It should be noted that the cause of foodborne illness is only determined in about 18% of the cases (Mead et al., 2000). Recent estimates suggest that 75% of the reported cases are due to mishandling in foodservice operations (McGorry, 1998).

Given the significant impact that foodborne illness has on society and the potential impact of foodservice operations, it was only natural that the government enacted legislation to help protect the public when they dine away from home. Public health inspectors in state and local jurisdictions conduct food safety inspections to ensure that meals are safe for the public to consume. After the inspection, the restaurant is either given a score or letter grade that shows exactly how the establishment complied with the code. One purpose of this scoring system is to improve compliance by all foodservice establishments with food safety standards (Almanza, Ismail, & Mills, 2002).

Despite the health inspectors efforts, the increase in dollars being spent at restaurants has been matched by an increased risk of contracting a foodborne disease transmitted by unknowledgeable food handlers (Cotterchio, Gunn, Coffill, Tormey, & Barry, 1998). Lewis and Salsbury attributed outbreaks of foodborne illness to five factors; improper holding temperatures, inadequate cooking, contaminated equipment, food from an unsafe source, and poor personal hygiene (Lewis & Salsbury, 2001). Of those factors all but one, food from an unsafe source, are generally under the control of the food handlers in the kitchen. Other studies have narrowed the list of critical offences committed by food handlers that lead to foodborne illness.

Several studies found that the two major causes of foodborne illnesses are poor food-handling along with time and temperature abuse (Bryan, 2002; Gross & Harris, 2002; Lynch, Elledge, Griffith, & Boatright, 2003). In 2004, the FDA released the second part of a three part longitudinal study designed determine which food preparation practices and employee behaviors are most commonly reported to the CDC as "Foodborne Illness Risk Factors." The top three risk factors observed were: improper holding/time and temperature, poor personal hygiene, and contaminated equipment/prevention of contamination (Food and Drug Administration, 2004).

Clearly, mistakes made by unknowledgeable food handlers place the dining public at risk. Even with regular inspections, the numbers indicate the problem is not going away. In an effort to reduce the risk, states have begun turning to training and mandatory certification of food handlers (Raval-Nelson & Smith, 1999). Since 1989, the number of states requiring certification has increased from three to 17 with four more currently working on legislation to require certification of food handlers (Almanza & Nesmith, 2004).

Training and certifying the nation's food handlers is not an easy task, it is likely to require significant investments by both the industry and the government. While training has been shown to have a positive impact on food safety (Mathias, Sizto, Hazelwood, & Cocksedge, 1995; Riben, Mathias, Campbell, & Wiens, 1994), there are still a number of questions as to the effectiveness of mandatory certification.

Few studies have been done looking specifically at the impact of certification on food safety. One study suggested that foodservice manager certification has limited impact on inspection results with the exception of scores related to operation-equipment structure (Wright & Feun, 1986). By contrast, another smaller study found managers who were mandated to attend a training and certification program did show a significant improvement in overall inspection scores (Cotterchio et al., 1998). A critical review of food safety training and certification research by Riben, et al (1994) used a type of meta-analysis to evaluate 39 articles. Criteria were used to separate out 13 of the studies for comparative analysis. The 13 research studies were then divided into two main categories; those that focused on food safety training and certification, and those that focused on the inspection process. Of the seven studies looking at certification, five showed an improvement in inspection scores after certification while the remaining two found no such improvement (Riben, et al, 1994). A more recent study in Los Angeles County found improvements in routine inspection scores with certification. These results are difficult to compare to other studies because the program was multi-faceted and went beyond routine inspections. Additionally, they included inspections based on customer complaints about unsafe food practices (Fielding, Aquirre, & Palaiologos, 2001).

The primary purpose of this study was to examine the impact of credentialing food handlers on their food safety knowledge and how that knowledge impacts food safety as measured by health inspection scores. This study also served as a pilot for a larger national study.

METHODOLOGY

The sample for this study was restaurants in Tippecanoe County, Indiana including the cities of Lafayette and West Lafayette. Credentialing information was collected using a survey which was developed for this study. The survey was pre-tested and reviewed by a panel of food safety professionals. The panel included faculty members from Purdue University and Michigan State University along with health inspectors from Tippecanoe County and the Indiana State Health Department. The survey was divided into three sections: information about the manager on duty (credentialing, education, experience, and training), knowledge questions, and information about the restaurant. Food safety knowledge was assessed using 10 food handling scenarios. Managers were asked to rate risk of a foodborne illness resulting from each of the scenarios on a scale of 0 to 10, with 0 signifying no risk and 10 extremely high risk. Restaurant information solicited included type of operation (using the standard categories defined by *Restaurants & Institutions*), chain versus independent, and if the unit/general manager was a certified food handler. The information about the manager and operation were used to help control for the impact of factors other than certification.

Surveys were distributed during routine health inspections conducted in accordance with the Tippecanoe County Health Department's standard procedures. A total of 100 surveys were distributed to restaurant managers by the four health inspectors between August and November 2003. While the inspector conducted the inspection, the manager on-duty was invited to complete the manager's survey. The cover letter accompanying the survey identified the purpose of the study and told the manager that their participation was strictly voluntary and their responses would be kept confidential. Once the survey was completed, the manager was asked to seal it in the return envelope and either mail it to Purdue University or give it to the health inspector. Copies of the inspection reports and any returned surveys were held by the county health department for a one-month period (as required by local policy) before being forwarded to Purdue University.

To identify which survey went with which inspection report, a six-digit random number was stamped on each survey. The inspectors were given labels with matching six-digit numbers to place on the corresponding inspection report. To maintain the anonymity of respondents, all identifying information about the manager and restaurant was masked prior to report being sent to Purdue.

Data were analyzed to determine correlations between certification, inspection scores, knowledge scores for each

question, and a composite inspection score. Composite inspection scores were calculated by first weighting each critical violation as four points and each non-critical violation as two. Points were doubled for repeat violations. An overall score was calculated for each report by summing all points. T-tests were used to compare the means by certification type for each of the food safety risk questions. Microsoft Excel XP Edition and SPSS 11.0 were used.

RESULTS

A total of 58 manager surveys and 117 health inspection reports were returned. After matching the manager surveys to the health inspection reports, a total of 57 surveys were matched with their respective inspection report. Because of differences in food safety certification programs, the data for certified managers were parsed by certification program. After parsing, only one of the certification programs was sufficiently represented to allow data analysis. The resulting data set contained 48 (41%) survey and matching inspection reports. Not all respondents answered all questions; therefore the number of responses included in some of the analyses was less than 48.

Respondents spent an average of 13.25 years working in the foodservice industry with 9.24 of those years in a management position. Seventeen of the respondents were owners and another 17 were general managers. Of the remaining respondents who reported their position, four were assistant managers, two were crew leaders, two were kitchen managers or assistant kitchen managers, and one was a line leader. The sample was almost evenly divided by gender with 55% (26) male and 45% (21) female respondents. The breakout for restaurant type can be found in Table 1.

Table 1
Classification of Type of Restaurant Establishment by Respondent (n=45)

Classification	Number of Respondents	Percentage
Family Dining	7	15.5%
Serve Burgers	7	15.5%
Casual Dining	6	13.3%
Cafeteria/Buffer	5	11.2%
Serve Chicken	4	8.9%
Sandwich/Bakery	4	8.9%
Coffee Bars	3	6.7%
Mexican	2	4.5%
Retail Establishments	2	4.5%
Asian	1	2.2%
Pizza	1	2.2%
Steak/BBQ	1	2.2%
Dinner House	1	2.2%
Bed and Breakfast	1	2.2%

Twenty of the respondents in the final sample were certified food handlers and 28 were not. Of those who were certified, the type of training most often used during the certification process was classroom training (18/20 or 90%) followed closely by textbook and video training (16/20 or 80% for each). The least often reported training methods used were on-the-job and computer-based, 30 and 10 percent of the respondents reported using them, respectively. The total for all methods exceeded 100 percent because most respondents received more than one type of training.

Managers who were certified reported a significantly different risk associated with three of the scenarios. In all three instances the certified managers rated the risk more in line with the level determined by the food safety panel for this study. The results for the 10 scenarios can be found in Table 2. While the difference was not significant at $\alpha = 0.05$, non-certified managers a better (lower) mean scores than certified managers; 11.8 versus 12.7. Health inspection scores were standardized based on critical and non-critical violations as described in the methodology.

The final section compared years in the industry and years in management with the health inspection score. The number of years the respondent had spent in the industry correlated with the health inspection score had a β -value of 0.056. The number of years the respondent had spent as a manager correlated with health inspection scores had a β = -0.06.

DISCUSSIONS AND CONCLUSIONS

Routine health inspections and the certification of food handlers are two methods that regulatory agencies use to ensure foods served in restaurants are safe. This study examined the relationship between certifying foodservice manager as food handlers and their food safety knowledge and health inspection scores.

Table 2
Ratings of Food Safety Risk for Scenarios by Certification Status (n=48)

Scenario	t-Value	Certified		Not Certified	
		Mean Score	Std Dev	Mean Score	Std Dev
Soup cooled in a refrigerator in a 5 gallon stock pot.	0.01	8.6	1.76	6.5	3.22
Raw beef stored above raw chicken	0.01	5.2	3.59	8.1	2.99
Chicken cooked to an internal temperature of 165°F, then served	0.02	1.7	1.42	3.5	3.31
Raw chicken stored at 45°F	0.68	8.0	2.98	7.6	2.94
Meat thawed on prep table for 5 hours	0.21	9.1	1.47	9.5	0.69
Dishwasher loads dishes, wipes hands on dry towel, then unloads dishes	0.24	8.7	1.45	8.0	2.53
Cook washes hands after using restroom, opens door with bare hands	0.57	8.3	2.08	8.7	2.24
Used steam table to bring rice up to temperature	0.34	8.2	2.43	7.4	2.49
Hamburger cooked to 140°F	0.66	6.9	3.60	7.3	2.79
Cross contamination of cutting boards, raw to ready-to-eat	0.45	9.1	1.89	8.7	2.06

Note: The scale for the score was from 0 to 10, with 0 signifying no risk and 10 signifying an extremely high risk

The results of the t-tests on managers' perceptions of the risk associated with food handling practices as described in the 10 scenarios, showed a significant difference between certification status for three of the means. In each of the three, certified managers' responses indicated a better understanding of food safety. The first scenario in which significance was found was: "Chicken noodle soup was prepared in a 5 gallon stock pot for serving the next day. After cooking, the entire stock pot full of soup was covered and placed in the walk-in refrigerator to cool." The mean scores were 6.4 for non-certified managers and 8.6 for certified managers. The higher mean score for certified managers indicated they had a better understanding of the need to cool foods quickly and how to do it. The next scenario, "Raw beef stored above raw chicken" described an acceptable practice; the risk factors should have been low. As with the first scenario, certified managers rated the risk more in line with what it actually was; as evident by their lower mean score, 5.2 versus 8.1. The final scenario in which significance was found, "Chicken is cooked to an internal temperature of 165°F (74°C), then served," gave the correct recommended final cooking temperature for chicken. Certified managers again demonstrated greater knowledge as indicated by their significantly lower risk score for this practice, 1.7 versus 3.5. The results of these three scenarios indicated that certified managers had a slightly greater knowledge of safe food handling practices.

The fact that there was no significant difference in the inspection scores for certified versus non-certified managers was unexpected given the results for the knowledge part of the survey. The reason for only observing a slight impact for certification on knowledge and no impact on scores could have been the small sample size and the impact of other contributing factors. The small sample size did not allow all contributing factors to be statistically controlled. Those contributing factors included health inspector, industry and management experience, and type of establishment. Tippecanoe County employs four health inspectors who conducted inspections for this study. Each inspector may have had a tendency to conduct the inspection differently, because the small sample size it was not possible to statistically control for inspector bias. Therefore, establishments inspected by stricter inspectors had more violations and consequently worse inspection scores.

The next contributing factor that could not be controlled for was experience. It is logical to assume that more experience can impact food safety: more experienced managers have had greater opportunity to learn about food safety. The two correlations used to compare the years in the industry and years as manager to health inspection scores were just outside the significance range. Had the sample been large enough to control for restaurant type, it is highly likely that they would have been significant. Despite the lack of significance, two trends were apparent. First, as expected the years of managerial experience was negatively correlated with inspection score. This means that the more management experience a person has the lower their health inspection score (low score indicates better compliance with food safety requirements). The opposite was true for industry experience below the manager level. Experience below the manager level was positively correlated with inspection scores. This means that the more time an individual has spent in the industry below the manager level, the more likely there were to be food safety problems as indicated by a poor health inspection. The reason for this is not clear. It could be that individuals who spent a lot of time as crew members learned more bad habits or developed a different mind set that placed less emphasis on food safety. It also may go deeper than that, back to the

environment in which the individual was raised. This important area will require additional study to determine the root cause for the observed trend so that corrective recommendations can be made.

The final factor, restaurant type, could also have significantly affected scores. Restaurants with more complex menus and preparation methods are more likely to have violations than operations with limited menus serving prepackaged foods. Because of the limited number of restaurants from each type, it was not possible to statistically control for this contributing factor.

In conclusion, this pilot study has raised several interesting issues regarding certification. It would appear that those certified were more knowledgeable, based on risk scores from the three scenarios where a difference was found. However, the greater knowledge did not translate into better health inspection scores. Because of the small sample, it was impossible to determine the influence of outside factors such as; restaurant type, position and experience level of manager, and difference among health inspectors. The results did indicate the need for a nationwide study, given the number of states turning to mandatory certification and the costs associated with certification.

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INSIDER TRADING AND HOSPITALITY ACQUISITIONS

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ABSTRACT

This study examines whether hospitality insiders use their private information to maximize their private benefits prior to hospitality acquisition payment announcements. For hospitality acquiring firms using stock or cash financing to pay for acquisitions, the level of abnormal insider transactions in the four quarters prior to an acquisition payment announcement was not significant.

Key Words: insider trading; acquisition; information asymmetry

INTRODUCTION

This study examines the effect of information asymmetry on insider trading activities in hospitality firms when the firms announce commitments to a particular type of payment for an acquisition. In modern hospitality corporations, managers and shareholders may have different information about the true value of their firm (Brealey & Myer 2000). This results in information asymmetry between the hospitality firm's managers and the firm's investors that may allow the managers to obtain abnormal trading profits (at the expense of investors) through purchases or sales of their firm's stock based on the manager's private information.

This study represents the first formal examination of this subject in the hospitality literature. Despite persistent debate about the level of market efficiency in the financial markets and the importance of information asymmetry, little research has so far addressed the process of insider trading around hospitality corporate events.

LITERATURE REVIEW

Private information presents hospitality insiders with opportunities for personal trading. If hospitality insiders have private information, they can use it for their private benefit—namely, to make positive abnormal returns on their investment portfolio. Insider trading by an acquiring hospitality firm's managers can also signal a manager's perception of her firm's performance after the acquisition. Knowledge of the difference between the market and the economic value of the acquiring hospitality firm prior to an acquisition payment announcement gives insiders an opportunity to trade their own shares advantageously. Hospitality insider selling prior to stock-financed acquisitions may signal a firm's overvaluation. Insider buying prior to cash-financed acquisitions may signal a firm's undervaluation.

Empirical tests suggest that managers often know their firm's stock price movement in advance and behave proactively. Finnerty (1976) found during an eleven-month holding period that the portfolios of insider buyers produced positive excess returns while the portfolios of insider sellers produced negative excess returns. Seyhun (1986, 1990) demonstrated that insiders tend to rely on private information to govern their transaction timing. While insiders purchase their firm's stock prior to an abnormal rise in stock prices, they tend to sell it prior to an abnormal decline in stock prices. During the 100 days subsequent to the insider trading day, abnormal returns to insider selling portfolios were negative, and abnormal returns to insider buying portfolios were positive. In a takeover, bidder managers make a greater number of prior insider purchases when the stock price reaction to the takeover announcement is large and positive than when it is large and negative. Seyhun concluded that managers in acquiring firms generally time their sell-related transactions to occur before stock-financed acquisitions and purchase-related transactions before cash-financed acquisitions.

Although the government regulates insider trading to keep a lack of private information from penalizing the uninformed investor, insider trading can still adversely influence stock prices in the financial market. Until 1980, neither the corporation nor an investor trading on the opposite side of an insider transaction had any legal remedies against the

insider. Only common law rules allowed suits against insiders for trading, and “the strictures of contract law applied only if the plaintiff could prove such special facts as misrepresentation of the security value” (Calton & Fischel, 1983).

Insider trading regulation became much stricter by statute after 1980. Civil penalties could be levied at three times the insider’s illegal profits, and the maximum criminal penalty was a \$1 million fine. Despite the strict regulation of insider trading since 1980, little evidence suggests that the increased enforcement of insider trading sanctions has actually deterred insider trading (Seyhun, 1992). In addition, “safe harbor” rules, which enable insiders to avoid any risk of insider trading liability, allow employees to file selling plans with the SEC and to sell their stocks regularly on a set date. This arrangement enables insiders to sell their stock legally prior to corporate informational events (Shell, 2001). The study presented here does not distinguish illegal trading from legal trading prior to acquisition payment announcements in the hospitality industry. Rather, it analyzes all insider trading at least one year before the public acquisition payment announcement.

Data: Sample of Acquiring Firms

The authors searched the Center for Research in Security Prices (CRSP) tapes for all NYSE, AMEX, and NASDAQ hospitality firms (SIC industry codes: hotel 7011, restaurant 5812, casino 7999, and cruise 4481) delisted during the 1983-1999 period. The CRSP tapes assign firms that are delisted due to acquisition with a delisting code between 200 and 203. After identifying the delisted firms (targets), the authors consulted the *Wall Street Journal Index* to determine the acquiring firms. Trade magazines like *Hotel & Motel Management* and *National Restaurant News* provided additional deals that involved private targets. In addition to these sources, the *Mergerstat Review* and the *Merger Yearbook* were used to identify acquisitions in the hospitality industry.

The authors divided the sample of acquiring firms into two subsets based on the acquisition payment type (cash and stock) as reported in the Dow Jones News Service (DJNS). Event date is the first day to announce the acquisition payment announcement in the DJNS. If the payment type for the observation was unknown, the acquisition was excluded from this study. This made the sample size equal to 50. The first sample subset consisted of the stock-payment group where only the acquirer’s common stock was used to pay for the acquisition (35 of the 50 observations). The second sample subset consisted of the cash-payment group where only cash was used to pay for the acquisition (15 of the 50 observations).

Insider Trading Data

The authors obtained insider trading data on the 80 observations in the sample from First Call Insider Research for the period 1982 to 2000. First Call Insider Research compiled the information from the original SEC filings. This study used data on hospitality officers’ and directors’ trading during the period prior to an acquisition payment announcement.

Abnormal insider trading was calculated by comparing insider trades in the study period (four quarters prior to the acquisition payment announcement) with insider trades in a control period of 36 months (beginning 48 months prior to the acquisition payment announcement and ending 12 months prior to the acquisition payment announcement). In addition, this study used only open-market stock transactions to determine insider sales and insider purchases (Kahle, 2000; Clarke, Dunbar & Kahle, 2001).

METHODOLOGY

Kahle (2000) suggests that two valid measures of insider trading are the number of times insiders trade (a trade-based measure) and the number of shares traded (a volume-based measure). Since Kahle showed the same result from both measurements, this study used the number of times hospitality insiders trade, weighting what each insider buys or sells equally, regardless of the number of shares involved.

This study used hospitality insider trading in the four quarters before an acquisition announcement to determine insider trading patterns consistent with Clarke, Dunbar and Kahle (2001). Annual abnormal sales (purchases) were calculated. They were defined as actual sales (purchases) minus expected sales (purchases) in the given year, where expected sales (purchases) are the mean annual sales (purchases) of that firm in the 36-month period beginning 48 months prior to the acquisition payment announcement. The authors used this procedure to calculate the abnormal number of sales and purchases per firm for the year prior to the acquisition payment announcement.

Since insiders are under some legal constraints in regard to trading on their own account during the six-month period prior to an acquisition, the abnormal number of sales and purchases per quarter during the 1-year period prior to the acquisition payment announcement were also calculated for each acquiring firm. Quarterly abnormal sales (purchases) are

defined as actual sales (purchases) minus expected sales (purchases) in the given quarter, where expected sales (purchases) are the mean quarterly sales (purchases) of that firm in the 36-month period beginning 48 months prior to the acquisition payment announcement.

T-tests were used to measure the significance of abnormal insider sales and purchases. The level of significance (that actual trading differs from expected trading) is reported at the ten-, five-, and one-percent levels. The p-value is calculated for a one-tail test.

RESULTS

Insider Trading Prior to Cash Financed Acquisitions

If managers of acquiring hospitality firms feel that their shares are undervalued, they have an incentive to use cash to pay for an acquisition and likewise to purchase their firms' shares on their personal accounts prior to a cash acquisition financing announcement. This would suggest that positive abnormal insider purchases occur prior to cash-financed acquisitions. Our results do not support this suggestion. As Table 1 shows, the p-values for abnormal insider purchases prior to a cash acquisition financing announcement are not significant.

Table 1
Abnormal Insider Purchases Around Cash-Financed Hospitality Acquisition Announcements

Quarterly periods relative to announcement	Sample size	Mean	Standard deviation	T-test	
				T-stat	P-value
-4,-3,-2,-1	15	-0.860	8.820	-0.360	0.375
-4	15	-0.828	2.097	-1.580	0.075*
-3	15	0.189	2.200	0.330	0.380
-2	15	-0.678	1.807	-1.450	0.080*
-1	15	0.528	3.182	0.640	0.280

*, **, ***: significant at the 10%, 5% and 1% levels, respectively

Since hospitality insider trading may be concentrated from twelve to six months prior to an acquisition payment announcement to avoid legal constraints, the authors also calculated abnormal insider trading on a quarterly basis for the four quarters prior to an acquisition financing announcement. The quarterly abnormal insider purchases are negatively significant in the four and two quarters prior to the announcement, implying that insider purchases during the pre-acquisition period were less than during the control period.

Table 2
Abnormal Insider Sales Around Stock-Financed Hospitality Acquisition Announcements

Quarterly periods relative to announcement	Sample size	Mean	Standard deviation	T-test	
				T-stat	P-value
-4,-3,-2,-1	35	-1.620	15.940	-0.600	0.280
-4	35	-0.200	6.200	-0.190	0.470
-3	35	-1.610	3.648	-2.570	0.012***
-2	35	-0.190	5.597	-0.200	0.460
-1	35	0.210	5.584	0.220	0.420

*, **, ***: significant at the 10%, 5% and 1% levels, respectively

Insider Trading for Stock-Financed Acquisitions

If managers of acquiring hospitality firms feel that their shares are overvalued, they have an incentive to use company stock to pay for an acquisition and likewise to sell their firms' shares on their personal accounts prior to a stock-financed acquisition announcement. This would suggest that positive abnormal insider sales occur prior to stock-

financed acquisitions. Our results do not support this. As Table 2 shows, the p-values for abnormal insider sales prior to a stock acquisition financing announcement are not significant.

The authors also calculated abnormal insider trading on a quarterly basis for the four quarters prior to each announcement of hospitality acquisition financing. The quarterly abnormal insider sales are negatively significant in the three quarters prior to the announcement, implying that the pre-acquisition period insider sales were less than those during the control period. Thus, it appears that the managers of stock-financed hospitality acquiring firms are aware of and adhere to the legal constraints on their trading.

CONCLUSION

The findings from this research on insider trading do not consistently support the supposition that insiders in hospitality firms invariably use their private information to maximize their private benefits prior to public acquisition payment announcements. For hospitality acquiring firms using stock or cash financing, insider trading did not result in significant abnormal transactions in the one year (four quarters) prior to an acquisition payment announcement. One possible explanation for these results is that the managers of acquiring firms do not trade on their own account to take advantage of privately held information. This decision is based on their desire to avoid the legal constraints on insider trading prior to major information announcements.

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THE DEBATE REGARDING HOTEL PROFITABILITY: FINDINGS ABOUT THE EFFECTS OF REVENUE INDICATIONS ON PROFITABILITY

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ABSTRACT

Our paper presents evidence that attempts to answer a debate regarding the relationship between hotel RevPAR and profitability, a debate around which there is a great degree of “noise.” Using a sample of 1,954 actual hotels for which both top line and bottom line indicators were available, we conclude through our statistical analyses that while hotels with higher revenue, and particularly higher room revenue, have a higher NOI in dollars, they do not necessarily have a more profitable business model in terms of NOI percentage. Also, we present brand level analyses.

Key Words: hotel, revenue, profit, brand

INTRODUCTION

As hotel management and development organizations formulate strategies and programs regarding hotel facilities and services, a question that naturally arises is what level of profitability the different types of hotels that conceivably could be developed generate. There is evidence that hotel managers and developers favor more profitable concepts over less profitable ones, as the recent trend towards the development of midscale hotels without food & beverage (restaurant and lounge operations) over midscale hotels with f&b suggests (O'Neill, 2003). Though the profitability goal of hotels is fairly clear, there remains a significant level of “noise” in the hotel industry regarding the actual relationship between hotel revenue indicators and profitability.

The debate

One side of the debate is exemplified by the Chairman and Chief Executive Officer of Strategic Hotel Capital, LLC, Laurence S. Geller, who has been quoted as saying, “higher RevPAR doesn’t always, in fact, it seldom does translate into higher profits because of the necessary costs to induce higher levels of RevPAR.” (Watkins, 2002, page 11)

On the other hand, the President and Chief Operating Officer of Marriott International, Inc., William J. Shaw, was quoted during a recent speech as saying, “I wouldn’t necessarily agree with the Chairman of Strategic that the highest RevPARs don’t have the highest profits.” (Shaw, 2002, speech) Since this question regarding the actual relationship between revenue indicators on profit is an empirical one, we sought to answer it using the best available empirical data.

In addition to bottom-line financial indicators, top-line financial indicators, such as ADR and RevPAR, are valuable tools for hospitality executives and managers. Although it can be argued that financial executives are highly bottom-line focused, they also pay close attention to revenue maximization as indicated by ADR and RevPAR. In fact, these two ratios were ranked as the two most crucial operating indicators among lodging executives in one recent study (Sing & Schmidgall, 2002), and another recent study found that a hotel’s ADR is a better predictor of a hotel’s value than its net operating income, or NOI (O'Neill, 2003). The conclusion of both studies was that there is not only a relationship between a hotel’s top and bottom line, but that operators believe a hotel’s top line is an indicator of its potential as well as actual bottom line.

Although occupancy, ADR and RevPAR should explain a large amount of variation in a hotel’s bottom-line, brand affiliation is another important factor in that equation. The branding literature has demonstrated that consumers use brand name as an important quality cue (Jacoby, Szybillo & Busato-Schach, 1977). Moreover, consumers are typically willing to pay a price premium for quality brands (Johnson & Selnes, 2004). Consequently, research in this area should isolate the effects of branding to fully understand the relationships between occupancy, ADR, RevPAR and profitability.

METHODOLOGY

To better understand the relationships between hotel top and bottom line, we used data graciously provided to us by Smith Travel Research. Specifically, Smith Travel Research provided to us occupancy percentage, average daily rate (ADR), rooms revenues per available room (RevPAR), and net operating income (NOI) for 2003 regarding a total of 1,954 actual hotels for which all of these data were available for the same 12-month time period. Characteristics of this sample of hotels are presented in Table 1 (means, minimums and maximums) and Table 2 (frequencies).

Table 1
Hotel Sample Characteristics - 2003

Characteristic	Mean	Minimum	Maximum
Number of rooms	236	15	2,860
Occupancy	66.7%	23.5%	97.3%
ADR	\$93.82	\$27.95	\$577.06
RevPAR	\$62.77	\$12.42	\$341.37
Room Revenues	\$6,536,711	\$363,919	\$131,371,602
Total Revenues	\$9,789,960	\$385,751	\$215,894,640
NOI (\$)	\$1,705,280	(\$11,273,498)	\$57,273,088
NOI (%)	19.2%	(85.3%)	87.5%

Table 2
Hotel Sample Frequencies

N	1,954
Scale	
Luxury chains	2.4%
Upper upscale chains	29.7%
Upscale chains	31.2%
Midscale w/ f&b chains	8.2%
Midscale w/out f&b chains	15.4%
Economy chains	8.6%
Independents	4.5%
Location	
Urban	16.7%
Suburban	39.7%
Airport	18.9%
Highway	18.0%
Resort	6.7%
Region	
New England	5.3%
Middle Atlantic	9.2%
South Atlantic	26.5%
East North Central	12.2%
East South Central	5.8%
West North Central	5.3%
West South Central	11.8%
Mountain	8.1%
Pacific	15.4%
All Suite	38.0%
Not All Suite	62.0%
Extended Stay	21.5%
Not Extended Stay	78.5%
1 or more Restaurants	60.1%
No Restaurants	39.9%

Using linear regression analysis, we found that taken together, a hotel's occupancy percentage and ADR are significant predictors of a hotel's net operating income, or NOI ($R^2 = 0.22$, $p < .001$). Specifically, hotels with higher occupancies and ADRs have higher NOIs, with each additional point in occupancy resulting in an additional \$61,864 in NOI, and each additional dollar in ADR resulting in an additional \$42,509 in NOI. Similarly, we found RevPAR to be a significant predictor of NOI, with each additional dollar in RevPAR resulting in an additional \$66,877 in NOI ($R^2 = 0.25$, $p < .001$). Also, individually, occupancy ($R^2 = 0.03$, $p < .001$) and ADR ($R^2 = 0.20$, $p < .001$) (the two components of RevPAR) are each significant predictors of a hotel's NOI, though the effect size for occupancy, as a predictor of NOI, is relatively low.

When we considered total room revenues, the relationships between top and bottom line were even stronger from a statistical standpoint ($R^2 = 0.72$, $p < .001$). In this analysis, each additional dollar in room revenues resulted in an additional 34 cents in NOI. Interestingly, when we considered total revenues rather than room revenues as a predictor variable, the relationship was also statistically significant ($R^2 = 0.72$, $p < .001$), but each additional dollar in total revenues resulted in only an additional 20 cents in NOI. We conclude that while a hotel's NOI is driven by revenue, it is primarily driven by room revenue, not food & beverage or ancillary revenue. In other words, while higher revenues do result in higher profit, all revenues are not equally profitable.

Since the previous analysis focused on percentages and dollars at the top line compared to dollars at the bottom line, we believe it would also be beneficial to compare percentage and dollars at the top line to percentages, i.e., profitability, at the bottom line. In this analysis, we found that a hotel's occupancy percentage is a significant predictor of a hotel's NOI percentage, with higher occupancy resulting in higher NOI ($R^2 = 0.14$, $p < .001$). However, we found that ADR is not a significant predictor of NOI percent ($R^2 = 0.00$, $p = .05$). Similarly, we found room revenue to be an insignificant predictor of NOI percent ($R^2 = 0.00$, $p > .05$). We found RevPAR to be a significant predictor of NOI percent, but with a relatively small effect size ($R^2 = 0.00$, $p < .01$). Similarly, we found total revenue to be a significant predictor of NOI percent, but with a relatively small effect size ($R^2 = 0.00$, $p < .05$). To the extent statistically significant (though perhaps not practically significant) relationships were found in these analyses, we believe that such results are at least somewhat attributable to our relatively large sample size of 1,954 hotels.

Brand level analyses

We conducted brand-level analyses to better understand the relationships between hotel top-line and bottom-line indicators. Our data set included a total of 1,548 hotels in 18 brands with financial data regarding at least 30 hotels each. The 406 additional hotels used in our earlier analysis were either independent properties or members of brands with fewer than 30 hotels. We found there to be significant differences in occupancy, ADR, and RevPAR by brand ($p < .001$).

Hierarchical regression analyses were then used to test the effects of ADR and occupancy on NOI percentage while taking into consideration the effects of the brand. A two-step procedure was used in which the control variable was entered in the first step followed by the two performance indicator variables. Both occupancy percentage and ADR accounted for a significant increase in R-square (Change in $R^2 = 0.143$, $F(2,1544) = 135.43$, $p < .001$), indicating that these variables explained a significant amount of the variation in NOI percentage beyond that explained by the brand affiliation. Occupancy was positively linked to NOI percentage ($t = 16.33$, $p < .001$), while the coefficient for ADR was negative ($t = -2.5$, $p < .05$). These results with occupancy are congruent with our aggregate data, yet the inverse relationship between ADR and the hotel's bottom-line requires some explanation. It seems that the control variable (i.e., brand) accounted for a relatively large proportion of the variance in NOI percentage ($t = 9.03$, $p < .001$), thus contributing to the negative regression coefficient for ADR. Hence, when we removed the effects of branding, hotels with higher ADRs had lower bottom-line percentages.

DISCUSSION

Given these statistical analyses, we conclude that while hotels with higher revenue, and particularly room revenue, have a higher NOI in dollars, they do not necessarily have a more profitable business model in terms of NOI percentage. This conclusion provides some support for Laurence S. Geller's contention (Watkins, 2002). However, we also believe that ultimately, dollars are what count, so we conclude that the most profitable hotel business model is one that generates the greatest room revenue. To the extent that food, beverage, or ancillary facilities and revenue generate additional room revenue (not merely additional total revenue), through the attraction and accommodation of new, additional segments of lodging demand, such as groups desiring these ancillary facilities, it supports this profitable business model. This conclusion provides support for William J. Shaw's contention (Shaw, 2002).

Also, our findings provide additional support for the power of branding in influencing the hotel bottom-line. In our sub-sample, hotel brand was strongly linked to NOI percentage, i.e., all brands are not equally profitable. This finding is consistent with the notion that brands create financial value due to their ability to generate cash flows via relatively higher margins (Aaker & Jacobson, 1994). Given the strong link between brand equity and financial results, it is not surprising that previous research on the lodging industry found significant variation among U.S. hotel brands, not only in occupancy, ADR, and RevPAR, but in annual growth in RevPAR, as well (O'Neill & Mattila, 2004). Yet, it is clear that hotel companies differ in their choice of branding strategies, and hence, potential franchisees need to carefully examine the parent firm's brand portfolio. This issue is an important one because prior research in marketing suggests that the brand's contribution to the bottom-line might depend on the parent firm's branding strategy (Rao, Agarwal & Dalhoff, 2004). Some companies, such as Marriott, include the corporate name in most of their brands while others (e.g., Accor) employ a house of brands strategy (i.e., individual brand names for each segment). Although this research doesn't allow us to derive specific recommendations about the effects of the parent company's branding strategy on the hotel's bottom-line (or to reveal individual brand names), we believe that examining such effects in future studies would be highly beneficial to both hotel owners and franchisors.

Brand hopping, or "flag switching," among hotel owners and developers has become a concern among hotel franchisors over the past few years (Wall Street Journal, 2002). Clearly, different hotel brands not only have different business models that deliver different levels of profitability to hotel owners, but hotel owners who have learned about this situation, based on their prior brand relationships, have become less hesitant to seek brands that are in closer conformance to their financial goals. To assist such hotel owners and developers, we hope to have clarified some of the "noise" that exists in the hotel brand marketplace about the relationships between hotel top and bottom lines, using the best available statistical evidence. The bottom line of this study is that while hotels with a higher RevPAR generally have a higher NOI, they do not necessarily have a higher NOI percentage.

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PROFILES OF PERCEPTIONS TOWARD HOSPITALITY ARTICULATION

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ABSTRACT

Hospitality students and the industry benefit from the seamless transition of secondary through post-secondary levels of education. The process of articulation of hospitality programs requires cooperation among educators that is often influenced by the perceptions of the educators involved. This study examines the perception profiles of 129 United States educators—high school educators, two-year institutional educators, and four-year institutional educators—according to seven factors, or seven Stages of Concern, toward hospitality program articulation.

Key Words: education, articulation, perceptions, educators, hospitality, profiles

ARTICULATION BACKGROUND AND SIGNIFICANCE

Articulation is defined as “the process of coordinating the curricula of two or more educational institutions, enabling students to make a smooth transition from one level to another without experiencing delays, duplications of coursework, or loss of credit” (Jackson, p. 10). Sometimes, articulation is referred to as “transfer articulation.”

The articulation process requires cooperation among educational programs that may often be influenced by the perceptions of those involved. Perceptions, according to Gestalt psychology theories, are personalized by an individual, or group, or by individuals within a group. Hospitality educational program managers who understand perceptions of their constituents are more likely to be able to overcome barriers and maximize articulation opportunities for students. Descriptive information about the current state of perceptions toward hospitality program articulation in the United States may prompt dialogue leading to creative solutions for smoother articulated pathways.

Articulation benefits many stakeholders and improves student access to higher education. For all programs of study in the United States, half of the students who matriculate into baccalaureate programs are from community colleges (Cohen). This proportion is even higher for underprivileged and minority populations (Kinder, p. 11). Hospitality industry employers gain from more effective processes of workforce development. Taxpayers will appreciate the better use of financial resources for providing public education through improved high school and higher educational program planning.

Perceptions and concerns

Immanuel Kant stated, “Perceptions are individual realities” (Webrenovators). How individuals or groups perceive a similar subject, innovation, or event will vary with previous experience. Perceptions include the relationship of discrete factors, such as ambiguity, familiarity, quantity, size, or magnitude (Berelson & Steiner, p. 112–120), and Gestalt postulated that readiness to respond, motivation, and emotional state of the individual were additional factors embedded within perception (One up info).

Perception toward educational innovations, such as hospitality program articulation, may affect the success of implementation. The Concerns-Based Adoption Model (CBAM) is used by educational leaders to understand these phenomena. Hall & Hord interpreted CBAM to include Seven Stages of Concern (SoC) that measure educators' perceptions toward the acceptance of innovations. Newlove and Hall refer to perceptions as *concerns*: “the feelings, the preoccupation, thought and consideration that is given to a particular issue or task.” As Gestalt perceptions are personalized by the individual, concerns are personalized and described by differential degrees of arousal, dynamic to an individual or group, and traced by developmental movement through stages (Newlove & Hall, pp. 7-9).

The SoC classifies the progressive stages by seven discrete levels: *0-Awareness*, *1-Informational*, *2-Personal*, *3-Management*, *4-Consequence*, *5-Collaboration*, and *6-Refocusing*. The SoC expands on research by Frances F. Fuller who identified four levels of concerns—*unrelated*, *self*, *task*, and *impact*. Fuller explained that in the *unrelated* stages, *SoC Stage 0*, participants are not concerned with the innovation but are concerned with other non-related factors. In the *self* stage, *SoC Stages 1 & 2*, participants focus on concerns for *self* or how the innovation benefits, or fails to benefit, the participant. Fuller's third stage, *SoC Stage 3*, is labeled the *task* stage where the participant is concerned about how to implement, or manage the innovation. Finally in the Fuller's fourth stage, *SoC Stages 4-6*, the *impact* stage, the focus is the on the impact on students and the means to improve the implementation of the innovation (Hall & Hord, pp. 58-61).

Hall and Hord associated Fuller's *unrelated* stage to their *0-Awareness* stage. They dissected Fuller's *self* stage into stages *1-Informational* and *2-Personal*. Fuller's *task* stage equated to stage *3-Management*. Finally, Hall and Hord asserted that Fuller's *impact* stage includes three SoC stages, which are *4-Consequence*, *5-Collaboration*, and *6-Refocusing* (1998, p. 61).

Gene E. Hall, Archie A. George, and William L. Rutherford developed the Stages of Concern Questionnaire (SoCQ), an instrument that includes thirty-five questions—five questions addressing each of the seven Stages of Concern. Each question is posed on a Likert scale from zero to seven indicating the degree of concern for that stage. The higher the Likert scale number, the higher the level of concern (p. 24). Hall, et al. tested the SoCQ's reliability and validity with hundreds of educators over two-years of longitudinal studies (1998, p. 17).

A review of literature revealed that the SoCQ was used by Rogers and Wilson in a research study in 1992 focusing on Tech Prep articulation in Idaho and Jackson's 2000 dissertation examining Tech Prep articulation in Georgia. Tech Prep is a national educational initiative aimed at connecting learning pathways and articulation opportunities from secondary through postsecondary career programs, including hospitality programs.

Research questions and hypotheses

This paper addresses three research questions. Each research question is paired with its testable null hypothesis statement.

- Research question 1: With respect to transfer articulation of hospitality programs in the United States, how do the Stages of Concern profiles compare for high school educators, two-year institutional educators, and four-year institutional educators?
- Ho1: Among the three groups—high school educators, two-year institutional educators, and four-year institutional educators—there will be no similar average Stages of Concern profiles
- Research question 2: With respect to transfer articulation of hospitality programs in the United States, which of the seven Stages of Concern has the highest peak score for high school educators, two-year institutional educators, and four-year institutional educators?
- Ho2 Among the three groups—high school educators, two-year institutional educators, and four-year institutional educators—there will be no statistically significant difference of the average peak scores, marking the peak concern, of seven Stages of Concern.
- Research question 3: With respect to transfer articulation of hospitality programs in the United States, what differences, if any, exist in the perceptions of the seven Stages of Concern among high school educators, two-year institutional educators, and four-year institutional educators?
- Ho3: There will be no statistically significant difference of the averages among the three groups—high school educators, two-year institutional educators, and four-year institutional educators—on the seven Stages of Concern.

METHODOLOGY

This research took place during late winter and early spring of 2004. The population consisted of educators representing U.S. high school, two-year, and four-year hospitality programs. This study used a nonrandom (nonprobability) convenience method of sampling. The February 2004 membership list for the International Council on Hotel, Restaurant and Institutional Education association (I-CHRIE) was used for the pools from which to select the two-year institutional educators and four-year institutional educators of hospitality programs. The Hospitality Business Alliance (HBA) roster, dated August 28, 2002, was used for the high school group of educators. For all educator group samples N=100.

The SoCQ was modified for this study replacing the term *innovation* with *articulation*. The instrument was then formatted for the Web and included an opening page, 35-item quantitative items and three dialogue boxes for open-ended questions. The Web-instrument was pilot tested with nine hospitality educators in September 2003. Three Web-instruments identical in all respects but the name of group were created, each with its own Web link. There was a high school educator Website, a two-year educator Website, and a four-year educator Website. This procedure of directing each group to a separate site enabled the data for each group to be captured in separate delimited text files. All instruments submitted were complete as the Web-instrument was designed to only accept completed instruments. The three delimited text files were imported into Microsoft Excel 2002 and then into SPSS Base 9.0 software for data analysis.

On the first day of the data-collection period, each potential respondent was sent a personalized e-mail and a personalized postal letter inviting the educators to participate in the study. Follow-up e-mail requests were sent on day

seven and sixteen. An analysis of the responses on day sixteen revealed 25 responses from high school educators, 46 from two-year institutional educators, and 44 from four-year institutional educators.

Table 1
Summary of N responses

	High school educators	Two-year institutional educators	Four-year institutional educators	Total
Sample Size	100	100	100	300
E-mail and postal mail Number not deliverable	3	0	0	3
Percent not deliverable	3%	0%	0%	1.0%
Number of instruments reset to sample via fax	6	0	0	2.0%
Effective sample size	97	100	100	297
Surveys returned by e-mail	31	48	46	125
Surveys returned by fax	4	0	0	1.3%
Total number returned	35	48	46	129
Percent of surveys returned to sample size	35%	48%	46%	43.0%

This disproportionate response of the high school group prompted the researcher to add an additional step. On the seventeenth day, twenty high school educators were randomly selected from the high school non-respondents for phone call follow-ups. Fourteen educators were reached by telephone and it was learned that high school educators do not have the similar, ready, or reliable access to the Internet or the Web as their higher-educational counterparts. Six of the fourteen high school educators said they would only be able to participate in the study if the instrument was received by fax. This problematic access of high school educators to Web instrumentation is one of the findings of this study.

Table 2
Summary table of group mean of total on each of the seven Stages of Concern
for each of the three groups converted to percentiles

Seven Stages of Concern	High school educators	Two-year educators	Four-year institutional educators
0-Awareness	80.43	65.02	73.78
1-Informational	68.63	70.50	64.63
2-Personal	69.31	67.81	55.76
3-Management	56.57	43.94	45.61
4-Consequence	35.69	41.75	34.26
5-Collaboration	48.54	57.52	49.74
6-Refocusing	44.74	51.15	44.41

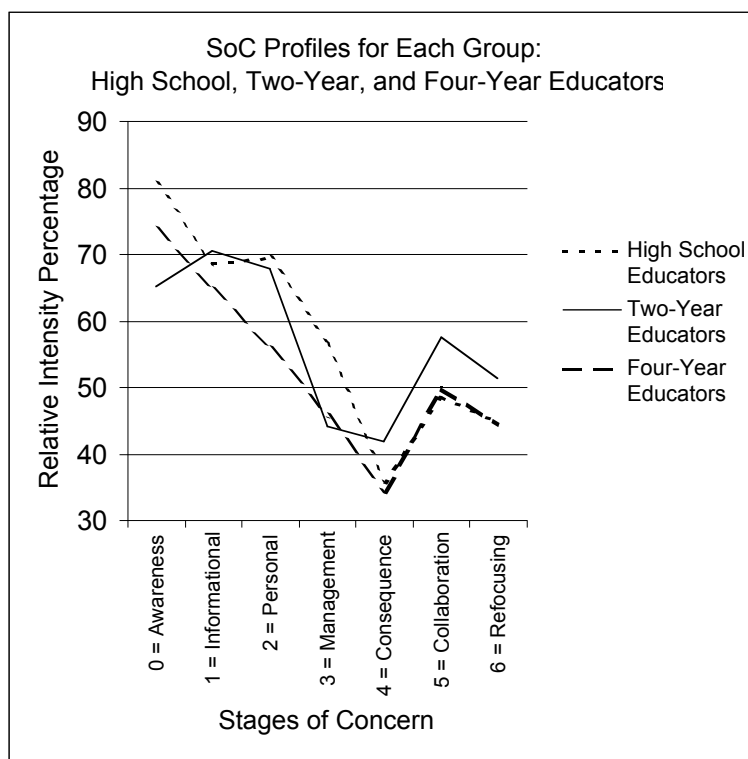
The researcher reflected weighted the action of the extra step for the high school group against the purity of research design methodology. The Web challenges of high school educators were unforeseen. A review of prior research literature revealed no similar descriptive studies on hospitality program articulation; this study may be the first descriptive on this topic; and without sufficient response from all three groups statistical tests could not be performed at an alpha level of .05. At the end of the data-collection period, on day 28, the final high school group response rate was 35. Two-year and four-year educator responses were 48 and 46 respectively. Table 1 shows the data associated with the summary of N responses.

Data analysis procedures and findings

The group means on the totals for each of the seven Stages of Concern by the three groups were calculated and converted to percentiles as revealed in Table 2. The percentiles were plotted on an X-Y scale to illustrate the Stages of

Concern profiles. On the profile graph, the X-axis marks each of the Stages of Concern, while the Y-axis marks the relative intensity percentage for that stage. The table legend differentiates each group line. To improve readability, the Y-axis scale span percentiles 30 to 100. The Stages of Concern profiles are depicted in Figure 1.

Figure 1
Graph of the SoC profiles for each of the three groups:
high school educators, two-year institutional educators, and four-year institutional educators



These data in Table 2 became the input data for a Multiple Analysis of Variance (MAVOVA) test that revealed a Wilks's Lambda value equal to .056 with $p < .001$ (Multivariate $F(7,120) = 289.89$). This statistic indicated that there might be differences found among groups on at least one of the Stages of Concern and prompted a series of one-way Analysis of Variance (ANOVA) tests looking for statistically significant findings on any of the seven factors. The one-way ANOVA findings indicated that two of the Stages of Concern, *0-Awareness* and *2-Personal*, had significant statistics of less than .01, the statistic for *Stage 3-Management* was noted at .047.

The ANOVA findings prompted post hoc Tukey tests on *stages 0-Awareness*, *1-Personal*, and *3-Management* to look for any significant differences by pairs among the three groups. The significant Tukey findings are shown in Table 3.

Table 3
Significant findings of post hoc Tukey tests

Stage of Concern	Group	Group	Sig.	Is significant statistic less than or equal to .05?
0-Awareness	High school	Two-year	.000	Yes
		Four-year	.028	Yes
2-Personal	High school	Two-year	.886	No
		Four-year	.012	Yes
3-Management	High school	Two-year	.053	No,
		Four-year	.091	No

CONCLUSION

A manual authored by Hall et. al (1998) for interpretation of SoCQ Profiles was consulted for further analysis. Profiles for this study show the highest peaks on *Stages 1 and 2* and the second-highest peaks on *Stage 5-Collaboration*. Under these circumstances, the authors state that these groups have “concerns about looking for ideas from others, reflecting more a desire to learn from what others know and [are] doing rather than a concern for collaboration” (p. 54). The profile for all three groups also turns down on *Stage 6- Refocusing* indicating these group do not have new or creative ideas on how to do things differently with hospitality program articulation (p. 55).

Research question 1:

- ♣ The Stages of Concern profiles for the three groups of educators are more similar than dissimilar — as only three plotted points of the possible 21 plotted points indicated statistically significant difference

Research question 2:

- ♣ High school educators and four-year institutional educators cite *Stage 0-Awareness* as their peak concern with respect to hospitality curricular articulation.
- ♣ Two-year institutional educators cite *Stage 1-Informational* as their peak concern with respect to hospitality curricular articulation.

Research Question 3:

- ♣ High school educators perceive *Stage 0-Awareness* concerns of hospitality curricular articulation differently from two-year educators.
- ♣ High school educators perceive *Stage 0-Awareness* concerns of hospitality curricular articulation differently from four-year institutional educators.
- ♣ High school educators perceive *Stage 2-Personal* concerns of hospitality curricular articulation differently from four-year institutional educators.

IMPLICATIONS

The goal of this research was to use describe the current status of perceptions of hospitality educators toward program articulation. Perceptions of educators may be complex with pre-conceptions, biases, or prejudices. This study revealed statistically significant differences between high school educators and four-year institutional educators on personal concerns. Kintzer wrote that overcoming personal disputes that affect attitudes toward articulation is extremely important to successful articulation (p. 3). Friedman et al. stated that when personal factors are involved, groups may fail to work effectively as a team, tensions may rise, and prospects for articulation may decrease. This phenomenon of an unspoken problem, or tension, is metaphorically referred to as “the hidden elephant in the room” (1994, p. 29).

The significant difference in perceptions of *Stage 2-Personal* concerns between high school and four-year institutional educators may indicate that high school educators have more concerns about their role, decision-making, personal commitment, and potential conflicts associated with articulation. The implication of this conclusion is that interaction between high school and four-year institutional educators should be approached with greater respect for the personal concerns of the high school educators. If high school educators feel less empowered, then two-year institutional educators may wish to intercede or assist with mediation of higher educational articulation. No statistically significant difference on *Stage 2-Personal* concerns was noted between two-year institutional educators and four-year institutional educators.

The findings of this study illustrate profiles of hospitality educator groups that are more similar than dissimilar, anxious to collaborate and learn from each other, but without ideas on how to do things differently. The three levels of hospitality educators should come together at seminars, conferences, and round-tables to share best practices and brainstorm better systems for hospitality articulation. These groups appear to be eager for the facilitation of such dialogue. Improvements in articulation practices will provide greater access and seamless pathways through higher education for the benefit of students and the hospitality industry.

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THE USE OF ACTIVITY-BASED COSTING MENU ENGINEERING:
A MORE ACCURATE WAY TO MAXIMIZE PROFITS FROM A RESTAURANT MENU

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ABSTRACT

Traditional cost accounting systems have been replaced in recent years in the manufacturing sector by Activity-Based Costing (ABC) systems. This study examines whether the incorporation of ABC data into traditional menu engineering methods provides food service managers with an improved tool for cost and profitability analysis. The study uses ABC data collected from a restaurant in a western urban area of the United States. The results suggest that Activity-Based Costing Menu Engineering may be a superior method for establishing overall menu profitability, and that a restaurant manager's menu management decisions will differ dramatically if he or she is confronted with differing results from a contribution margin menu engineering analysis and an ABC approach.

Key Words: Restaurants, Profitability, Activity-Based Costing, Cost Accounting, Menu Engineering

INTRODUCTION

A major challenge for restaurant managers is to find a balance between appropriate product pricing and serving customers' diverse needs. Although managers generally are able to monitor customers' needs, most lack specific knowledge as to whether they will maximize overall profits by meeting needs, in part because restaurant managers often do not know the true profitability of their various menu items (Raab and Mayer, 2004).

The restaurant industry generally establishes menu prices by using contribution margin analyses, a process by which a desired food cost percentage is marked-up with the expectation that the difference between a menu item's food costs and the menu item's price will cover all undistributed operating costs as well as taxes and profits (Bell, 2002; Raab and Mayer, 2004). However, in recent years, the restaurant business has become more capital intensive (while remaining labor intensive), and operating expenses, such as labor and other undistributed costs, have increasingly captured a larger percentage of the total cost structure of a restaurant (Schmidgall, 1997; Raab 2003). As a result, the restaurant industry is faced with the challenge of controlling these major costs while maintaining superior service levels, because service provision is a key part of the product in any restaurant. While restaurant patrons expect quality of food and beverage items, many of them visit restaurants for the service experience itself.

Therefore, controlling labor costs without decreasing the level of service is a daunting task. Some restaurant studies suggest approaches that incorporate labor costs into menu item pricing (LeBrutto, Ashley and Quain, 1995; 1997; DeFranco and Noriego, 2000; Raab and Mayer, 2004). Notwithstanding, menu item profitability is rarely analyzed, and, at best, traditional menu engineering approaches are applied to gain insights about menu profitability (LeBrutto, Ashley and Quain, 1995; 1997; Raab and Mayer, 2004). Even though menu engineering provides food service managers with a useful tool for cost analysis (LeBrutto, Ashley and Quain, 1995; 1997; DeFranco and Noriego, 2000; Bell, 2002), it is nevertheless based on contribution margin (CM) analysis and cannot reveal the true profitability of a menu item if menu prices are set without incorporating all of the restaurant's undistributed operating costs. In competitive market conditions, this presents a significant problem, because proper costing and pricing measures become extremely important as profit margins diminish. Thus, restaurant operators may simply no longer be able to afford to price based on marking up their variable product costs, or to analyze their menu items' profitability based solely on contribution margins.

Kaplan and Cooper (1992) demonstrated that the domain of traditional contribution margin analyses could be greatly enhanced by the use of Activity-Based Costing (ABC). ABC has major advantages over other costing methods by showing the ability to trace overhead costs to individual product units, which allows for more accurate unit costing and

pricing. Several studies have shown the ability to apply ABC to the restaurant industry; therefore, they have made ABC data available to establish an extension of traditional CM-based menu engineering (Raab, 2003; Raab, Mayer, Ramdeen and Ng, 2005). This paper seeks to test and demonstrate whether the incorporation of ABC data into traditional menu engineering theories provides food service managers with an improved tool for cost and profitability analysis of their menus. The subsequent sections of this paper will explain the basic concepts of ABC application to the restaurant industry and discuss and contrast CM and ABC menu engineering by using data collected from a full service restaurant.

Traditional Menu Engineering

Kasavana and Smith (1990) are known for the development of menu engineering (ME). The authors also incorporated Pavesics' profit factor analysis into their analysis matrix. LeBrutto, Ashley and Quain (1995; 1997) extended the ME approach by incorporating labor components into the analysis. ME captures both the profitability and the popularity of menu items with an emphasis on contribution margins. The CM for an entrée is established by subtracting the food costs from the menu item's revenue. In this study, two menu engineering analyses, one using the traditional CM approach and the second using the new ABCME approach, were conducted in a full service restaurant in a western urban area of the United States (USA). The restaurant had been operating at a negative profit margin and management suspected that the dinner menu was largely unprofitable. Using data from this restaurant, the CM analysis was conducted first.

The total quantity of each dinner item sold during the month of November 2002 was obtained from the restaurant's point-of-sales system. Each item was listed on an Excel spreadsheet that incorporated columns for number of items sold, menu mix percentages, each item's food cost (obtained from the chef), each item's CM (entrée's price, less its variable cost), and total menu costs, revenues, contribution margins and profit factors.

First, the menu mix percent for each item and the average menu mix percentages for each item on the dinner menu were established by dividing the total count of the item into the total count of all menu items. The dividing point for establishing low or high popularity is calculated by multiplying 70 percent by $1/n$, where n equals the number of competing menu items (Kasavana and Smith, 1990; Schmidgall, 1997; Bell 2002). The average menu mix for the entire menu was 5 percent. This value indicates that each menu item has to represent at least 5 percent or more of total sales in order to be classified as having higher than average popularity. The results displayed in Table 1 show that six menu items had less than average popularity. These items were: 1) "Pasta Marinara"; 2) "Pasta Marinara/Chicken"; 3) "Pasta Marinara/Shrimp"; 4) "Pasta Marinara/Vegetable"; 5) "Pasta Marinara/Shellfish"; and, 6) "Ravioli".

The menu items were tested for their profitability by establishing an average CM value for the menu by dividing the total menu CM into the total number of menu items sold (Kasavana and Smith, 1990; Schmidgall, 1997; Bell 2002). This resulted in an average menu CM of \$14.51 ($\$8169.02/563 = \14.51). Each item that displayed a value equal to or above this average was considered to be profitable. The following eight menu items showed below average profitability: 1) "Pasta Marinara"; 2) "Pasta Marinara/Chicken"; 3) "Pasta Marinara/Shrimp"; 4) "Pasta Marinara/Vegetable"; 5) "Mushroom Chicken"; 6) "Ravioli"; 7) "Salmon"; and, 8) "Shrimp and Scallops".

The next step in this analysis was to classify (Schmidgall, 1997; Bell, 2002) each of the fourteen menu items. The profitability and popularity classifications of each menu item results in four categories. A menu item with higher than average popularity and profitability is referred to as a Star, while an item with higher than average profitability and lower than average popularity is called a Puzzle. Menu items with lower than average profitability and higher than average popularity are called Plow Horses. Finally, menu items with lower than average profitability and popularity are considered Dogs (Schmidgall, 1997; Bell 2002).

The classifications revealed that the menu had five items that were Dogs (all pasta dishes, including "Ravioli", but excluding "Pasta Marinara/Shellfish"). The analysis classified "Pasta Marinara/Shellfish" as a "Puzzle", which means that this item was not popular but was profitable. The menu included three menu items that were classified as "Plow Horses" ("Mushroom Chicken", "Salmon", and "Shrimp and Scallops"), characterizing them as popular but not profitable items. Finally, the analysis revealed five items as "Stars" ("Pork Osso Bucco", "Mira Lago Paella", "Chilean Sea Bass", "Rib Eye Steak", and "Filet Mignon"). These items were both popular and profitable.

After the menu items are classified according to profitability and popularity, each menu item's share of the total menu profit needs to be revealed (Kasavana and Smith, 1990; Schmidgall, 1997; Bell, 2002). This requires calculation of a Profit Factor (PF). This is accomplished by a two-step Profit Factor (PF) calculation (Bell, 2002). First, the average CM is determined by dividing the total menu CM by the number of menu items. The total CM of each item on the menu is divided by the menu average. The PF is the relative total profitability of each menu item and provides analytical data that allows a more sensitive classification of menu items. The average of all PF figures is always 1.0. The higher PF of some

menu items implies that other items will necessarily have lower PFs. A well-balanced menu should show a PF range of around 0.9 to 1.1 (Kasavana and Smith, 1990).

Table 1
CM Menu Engineering Results

Entrees	Menu Mix (MM)	Item CM*	Menu Costs (\$)	Menu Revenues (\$)	Menu CM	MM Class **	CM Class ***	PF ****
Pasta Marinara	4.97	7.95	56.00	278.60	222.60	L	L	0.38
Pasta Marinara Chicken	3.37	10.95	57.00	265.05	208.05	L	L	0.36
Pasta Marinara Shrimp	3.02	10.95	51.00	237.15	186.15	L	L	0.32
Pasta Marinara	1.42	9.45	20.00	95.60	75.60	L	L	0.13
Vegetable								
Pasta Marinara Shellfish	3.55	14.70	65.00	359.00	294.00	L	H	0.50
Mushroom Chicken	9.95	10.45	140.00	725.20	585.20	H	L	1.00
Ravioli	3.20	9.77	75.33	251.10	175.77	L	L	0.30
Salmon	8.70	13.45	171.50	830.55	659.05	H	L	1.13
Shrimp & Scallop	9.95	10.95	392.00	1,005.20	613.20	H	L	1.05
Pork Osso Bucco	7.82	14.95	220.00	877.80	657.80	H	H	1.13
Mira Lago Paella	5.68	15.95	128.00	638.40	510.40	H	H	0.87
Chilean Sea Bass	9.41	17.95	265.00	1,216.35	951.35	H	H	1.63
Rib Eye Steak	13.68	15.95	539.00	1,767.15	1,228.15	H	H	2.10
Filet Mignon	15.28	20.95	774.00	2,575.70	1,801.70	H	H	3.09
Total	100.00		2,953.83	11,122.85	8,169.02			1.00

Notes: * = Menu item contribution margin ; ** = Classified by menu mix percentage; *** = Classified by menu item contribution margin, and **** = menu item Profit Factor; Dogs = L/L items; Puzzles = L/H items; Plow Horses = H/L items; Stars = H/H items.

Once all menu items are categorized into the four groups and PFs are established, management can make decisions about the menu structure. Preferably, all items on the menu should be Stars. However, in this analysis, only five items were found to be Stars ("Pork Osso Bucco", "Mira Lago Paella", "Chilean Sea Bass", "Rib Eye Steak", and "Filet Mignon"). "Pork Osso Bucco" and "Mira Lago Paella" contribute quite well to the overall profitability of the menu, as indicated by their Profit Factor close to 1.0. On the other hand, "Chilean Sea Bass", "Rib Eye Steak", and "Filet Mignon" have PFs that are much larger than 1.0. These items capture a large portion of the overall profitability of the dinner menu, which should be distributed more evenly to other items. Examples of profitable Plow Horses in this analysis are the "Mushroom Chicken", "Shrimp and Scallops", and "Salmon" items, all of which have Profit Factors of 1.0 or greater. Furthermore, the only item classified as a Puzzle in this analysis is "Pasta Marinara with Shellfish". However, the PF for this item is low, indicating that the item is not truly profitable and portrays more of the characteristics of a Dog than a Puzzle. Finally, menu items identified as "Dogs" generally have very low profit factors. The other four "Pasta Marinara" dishes are therefore classified as Dogs.

THE APPLICATION OF ACTIVITY-BASED COSTING (ABC) TO THE RESTAURANT INDUSTRY

Traditional cost accounting systems were replaced in recent years in the manufacturing sector by Activity Based Costing (ABC) systems. ABC is superior over other costing methods because the system has the ability to trace overhead costs to individual products (Cooper, 1989; Cooper and Kaplan, 1992; Garrison and Noreen, 1997; Cokins, 2001). Raab (2003) developed an ABC model for the restaurant industry by modifying Cooper's (1989) ABC model for the manufacturing industry. The model was successfully tested in a full service restaurant in a western urban area of the United State, as well as in a Hong Kong buffet restaurant (Raab, 2003; Raab, Mayer, Ramdeen and Ng, 2005; Raab and Mayer, 2004). The next section of this paper provides a short description of how the ABC model can be applied to the restaurant business.

The first major component of the design stage was the identification of activities and activity centers. The activity centers were established across departments and accountability structures by combining homogenous processes. In restaurants, two activity centers are usually created: the Front-of-the-House (FOH), and the Back-of-the House (BOH). However, before activity centers are created, activities need to be identified. Major activities in the restaurant industry

include purchasing, receiving, storing, food preparation, cooking, cleaning, dining room set-up, customer seating, taking orders, ordering and serving food and beverages, table maintenance, cashing out customers, and customer communication. Garrison and Noreen (1997) suggest that all activities should be detailed in a Process Value Analysis (PVA), which is a flow chart that reveals all activities conducted in an organization and labels them as value-added and non-value added. In the restaurant industry, only activities that actually produce the product or provide service to the customer are value-added. For example, all customer communications occurring in the FOH and the production of menu items in the BOH are considered value-added activities. Non-value added activities include receiving, storing, moving goods, and waiting for processing. Basically, most non-value added activities consume resources without adding value to the product. Therefore, in order to minimize costs in a restaurant, these activities should be conducted as efficiently as possible.

The next steps of the design process involved the examination of the general ledger and the assignment of overhead costs into homogeneous cost pools. Homogeneous cost pools are a collection of overhead costs that share a common purpose, and for which cost variations can be explained by one cost driver (an estimated effort expended on each activity). According to the Uniform System of Accounts for Restaurants (USAR), overhead costs include the following items: Salaries and Wages; Employee Benefits; Direct Operating Expenses; Music and Entertainment; Marketing; Utility Service; General and Administrative Expenses; and, Repair and Maintenance Expenses (Schmidgall, 1997). Next, cost pools were divided by the number of cost driver units, which established cost driver rates for each cost pool. This pool rate was later applied in the second stage of the costing process to determine how much of the overhead cost pool cost was used by each individual entree.

The next step of the ABC process establishes second stage cost drivers by dividing the total costs of each activity center into activity cost driver pools. The ABC literature established that activities have a hierarchy and cost drivers enable activities to be grouped into different levels, such as unit-based, batch-related, product sustaining and/or facility sustaining (Cooper, 1990; Turney, 1991; Cokins, 2001). Thus, there are four categories of second stage cost drivers applicable to the restaurant industry. The first is unit cost drivers, which occur anytime a unit is produced and that are directly related to the number of units produced. The number of employee hours and units of utilities used are unit-based cost drivers applicable to the restaurant industry. The next category is batch cost drivers. Batch activities incorporate everything that is produced in batches, such as setting up the kitchen line, or purchasing.

Other cost drivers unique to ABC systems are product level drivers, signifying resources used by product-level activities that are performed to sustain products in the company's product line. Examples of product-level activities in the restaurant business are establishing and maintaining specifications, recipe testing, and expediting food production. Finally, the facility-sustaining activity level must be considered, which contains costs that sustain a company's general processes, such as accounting, marketing, property taxes, security and landscaping.

Each of the activity cost driver pools has its cost assigned to products using a second-stage cost driver unique to each cost pool. A cost driver pool is distributed to products based on the number of cost driver units it consumes. The overhead cost applied to the product is calculated by multiplying the number of cost driver units with the cost pool rates that were established earlier. Next, ABC costs that are calculated for each menu item are condensed as bills of activity that combine all costs involved in producing one menu item (except taxes); thus, operating profit for each menu item can be established. Finally, an ABC Menu Engineering (ABCME) analysis can be conducted, which is described in the next section of this paper.

Activity-Based Costing Menu Engineering

Even though ME is a useful tool for restaurant managers, the traditional CM approach discussed in the section above fails to consider overhead costs. Therefore, an extended version of the ME technique was implemented herein to reveal the differences between traditional methods and the ABC approach. In effect, the ABC approach replaces the contribution margin approach with an 'operating profit' (OP) method. This approach applies the same calculations to determine an item's popularity classification. However, its profitability classification, which is termed its 'Profit Factor', is attained by comparing each menu item's profit margin before interest and taxes (i.e., its OP) to a total menu average profit margin before interest and taxes. The Profit Factor (PF) can then be attained in two steps. First, the menu's average profit margin before interest and taxes is determined by dividing the total menu operating profit margin by the number of menu items. The total profit margin before interest and taxes of each item on the menu is then divided by the menu average. The resulting figure is the item's PF.

In this study, the ABCME approach contained some interesting findings (Table 2). The popularity analysis revealed the same results (with an average menu mix of 5 percent) as the CMME approach, which determined that six menu items had less than average popularity. These items were: 1) "Pasta Marinara"; 2) "Pasta Marinara/Chicken"; 3) "Pasta Marinara/Shrimp"; 4) "Pasta Marinara/Vegetable"; 5) "Pasta Marinara/Shellfish"; and, 6) "Ravioli".

Table 2
ABC Menu Engineering

Entrees	Menu Mix (MM)	ABC Cost	Menu Price	Total Menu Operating Profit	MM Class*	OP Class **	PF ***
Pasta Marinara	4.97	18.07	9.95	(227.36)	L	L	2.15
Pasta Marinara Chicken	3.37	18.65	13.95	(89.30)	L	L	0.84
Pasta Marinara Shrimp	3.02	18.52	13.95	(77.69)	L	L	0.73
Pasta Marinara Vegetable	1.42	17.64	11.95	(45.52)	L	L	0.43
Pasta Marinara Shellfish	3.55	18.94	17.95	(19.80)	L	L	0.19
Mushroom Chicken	9.95	19.63	12.95	(374.08)	H	L	3.54
Ravioli	3.20	19.78	13.95	(104.94)	L	L	0.99
Salmon	8.70	20.40	16.95	(169.05)	H	L	1.60
Shrimp & Scallop	9.95	24.45	17.95	(364.00)	H	L	3.44
Pork Osso Bucco	7.82	22.62	19.95	(117.48)	H	L	1.11
Mira Lago Paella	5.68	19.61	19.95	10.88	H	H	0.10
Chilean Sea Bass	9.41	21.74	22.95	64.13	H	H	0.61
Rib Eye Steak	13.68	25.10	22.95	(165.55)	H	L	1.56
Filet Mignon	15.28	27.64	29.95	198.66	H	H	1.88
Total	100.0			(\$1,481.10)			1.00

Notes: * = Classified by menu mix percentage; ** = Classified by menu item operating profit (menu item operating profit/menu item price); *** = menu item Profit Factor; PF of -1.0 denotes average profitability in this study; Dogs = L/L items; Puzzles = L/H items; Plow Horses = H/L items; Stars = H/H items.

The menu items were tested for their profitability by establishing an average OP value for the menu by dividing the total menu OP by the total number of menu items sold. This resulted in an average menu OP of \$-2.63 (\$-1,481.10/ 563 = \$-2.63). CMME suggests that each item that generates a value equal to or above this average is considered to be profitable. However, because the average OP value was negative, the traditional approach was adjusted to classify profitable items as those that showed an operating profit. On this basis, only three menu items showed profitability: 1) “Mira Lago Paella”; 2) “Chilean Sea Bass”; and, 3) “Filet Mignon” (see Table 2).

The next step in the analysis was to classify each of the fourteen menu items (Schmidgall, 1997; Bell, 2002). The classifications revealed that the menu had six items that were Dogs. These Dogs were all the pasta dishes on the menu, including “Ravioli”. This result differed from the CMME approach discussed above, since it identified “Pasta Marinara Shellfish” as an additional item classified as a Dog. Furthermore, the ABC approach revealed five entrées classified as Plow Horses, in contrast to the CM menu engineering approach that only classified three items as Plow Horses. These entrées were “Mushroom Chicken”, “Salmon”, “Shrimp and Scallops”, “Pork Osso Bucco”, and “Rib Eye Steak”. The ABC approach did not identify any individual entrée as a Puzzle, which was in contrast to the CM analysis that classified “Pasta Marinara Shellfish” as a Puzzle. Finally, while the CM menu engineering analysis revealed five entrées as Stars, the ABC analysis characterized only three items as Stars (“Mira Lago Paella”, “Chilean Sea Bass”, and, “Filet Mignon”).

Finally, after all menu items were classified according to their profitability and popularity, each menu item’s share of the total menu profit was revealed through the calculation of Profit Factors (PF). The results of this study must be interpreted carefully in light of its unusual PF calculations. Normally, the average relative profitability of a menu item in either CM or ABC Menu Engineering analysis would be indicated by a PF of 1.0. However, if the overall contribution margin or operating profit is negative, an average profitability is indicated by a PF of -1.0, which was the case in this study. As discussed earlier, the ABC analysis only found three items to be profitable (“Mira Lago Paella”, “Chilean Sea Bass”, and “Filet Mignon”). The PF analysis showed that the “Filet Mignon” was twice as profitable as all the other entrées. Because the overall operating profit for the menu was negative, the PF for this item (i.e., -1.88) basically indicated that this item contributed a large portion of the overall profitability of the dinner menu by contributing the least to the dinner menu’s overall loss. On the other hand, the “Chilean Sea Bass” displayed less than average profitability, while the “Mira Lago Paella” showed low profitability for an item classified as a Star (see Table 2).

None of the five items that were classified as Plow Horses (“Mushroom Chicken”, “Salmon”, “Shrimp and Scallops”, “Pork Osso Bucco”, and, “Rib Eye Steak”) displayed a PF that could identify them as profitable items. The “Mushroom Chicken” and the “Shrimp and Scallops” entrées showed the menu’s lowest profitability with PFs of 3.54, and

3.44, respectively. These large PFs indicate that these two entrees contributed over three times as much to the menu's operating loss than any other entrée on the menu. This result is a drastic contrast to the traditional CMME analysis, where these entrées showed good relative profitability with a PF of approximately 1.0. Finally, all entrées identified as Dogs had very low profit factors. The "Pasta Marinara" entrée had the lowest PF (i.e., 2.15), indicating that the entrée was approximately twice as unprofitable as the other items classified as Dogs.

IMPLICATIONS AND CONCLUSIONS

In this study, conducting Contribution Margin (CM) and Activity-Based Costing (ABC) menu engineering analyses for the same dinner menu in a restaurant revealed a remarkable difference in results (see Tables 3 and 4). These results have some important implications for the restaurant's management. The CM analysis revealed that a contribution margin of \$8,169 was available to cover all operating expenses, taxes and profits. On the other hand, the ABC approach showed a negative operating profit of (\$1,481), which did not allow for any profits from the entire dinner menu. On this basis, the results suggest that the ABCME approach may be superior to a CMME analysis. Furthermore, the classification and PF analyses also revealed some significant differences, which suggests certain managerial implications.

First, the CM approach classified five items as Dogs, while the ABC analysis identified six entrees as Dogs. These items should typically be eliminated from the menu. Sometimes there are possible justifications for retaining Dogs. For example, if an influential guest desires the item and if there is evidence that the item will become popular in the future, it might be retained. If the item needs to be retained on the menu, the price should be increased so it can at least achieve average profitability and thereby become a Puzzle (Bell, 2002). However, because the ABC analysis revealed a negative operating profit margin, all Dogs need to be eliminated immediately from the menu.

Table 3
Differences in Classification Results CM Menu Engineering and ABC Menu Engineering

	CM Menu Engineering Approach Classification Results	ABC Menu Engineering Approach Classification Results
STAR*	5	3
PUZZLE**	1	0
PLOW	3	5
HORSE ***		
DOG ****	5	6

Notes: * = Categorized by higher than average popularity/higher than average profitability;

** = Categorized by lower than average popularity/higher than average profitability;

*** = Categorized by higher than average popularity/lower than average profitability;

**** = Categorized by lower than average popularity/lower than average profitability.

In addition, the CM analysis revealed one item to be classified as a Puzzle. Generally, menu items identified as Puzzles represent another type of challenge to management. The first task of management should be evaluation of the reasons why this menu item is not popular. For example, management needs to assess the product quality and the price. Management also needs to consider that the popularity of a specific menu item may vary from one location of the company to another. In this case, since the item is profitable management needs to expand major efforts to increase the popularity of the menu item (Bell, 2002). However, the ABC analysis did not identify any single entrée as a Puzzle (see Tables 2 and 4).

Furthermore, the CMME analysis revealed three menu items that were classified as Plow Horses, which represent a management challenge especially in an unprofitable operation. For items identified as Plow Horses, strategies should focus on increasing contribution margins. These items are often the restaurant's signature item, and they are important because they attract customers to the operation. In order to improve profitability, a number of strategies are generally applied. First, prices of Plow Horses can be increased. However, management has to consider that Plow Horses are often very price elastic and an increase in price may result in a drastic decrease in popularity. A decrease in sales may be desirable if customers can be retained and convinced to switch to other, more profitable menu items. An increase in price may be feasible if customers perceive an increase in value for Plow Horses. For example, value perception can be increased by changing plate presentations and the location of the item on the menu. Evaluating and reducing all costs involved in the production of Plow Horses can also improve profitability. For example, recipe and food specifications can be appraised to

identify whether costs can be reduced without lowering perceived value. Finally, Profit Factors for Plow Horses will determine how to handle the items. Plow Horses with profit factors close to average profitability need to be handled very carefully because they are profitable by the weight of numbers sold (Bell, 2002), which is the case for the three items identified as Plow Horses on this dinner menu.

Table 4
Profit Factors (CM Menu Engineering and ABC Menu Engineering)

Entrees	Profit Factors CM Menu Engineering *	CM Menu Engineering Classification	Profit Factors ABC Menu Engineering **	ABC Menu Engineering Classification
Pasta Marinara	0.38	Dog	2.15	Dog
Pasta Marinara Chicken	0.36	Dog	0.84	Dog
Pasta Marinara Shrimp	0.32	Dog	0.73	Dog
Pasta Marinara Vegetable	0.13	Dog	0.43	Dog
Pasta Marinara Shellfish	0.50	Puzzle	0.19	Dog
Mushroom Chicken	1.00	PlowHorse	3.54	PlowHorse
Ravioli	0.30	Dog	0.99	Dog
Salmon	1.13	PlowHorse	1.60	PlowHorse
Shrimp & Scallop	1.05	PlowHorse	3.44	PlowHorse
Pork Osso Bucco	1.13	Star	1.11	PlowHorse
Mira Lago Paella	0.87	Star	-0.10	Star
Chilean Sea Bass	1.63	Star	-0.61	Star
Rib Eye Steak	2.10	Star	1.56	PlowHorse
Filet Mignon	3.09	Star	-1.88	Star

Notes: * = average relative profitability = 1.0; ** = average relative profitability = - 1.0.

On the other hand, the ABCME analysis revealed five Plow Horses, which greatly contributed to the operating loss of the dinner menu. In fact, these five items are actually much worse than Dogs, since their large Profit Factors (Table 4) demonstrate that they actually contribute as much as 3.5 times to the overall operating loss of the dinner menu at the restaurant. The Dogs shown in Table 4 actually contributed much less to the total loss stemming from the dinner menu. Thus, while Dogs have typically been thought of as the worst items on a menu, the ABCME approach has revealed that items classified as Plow Horses may be even worse than Dogs for a restaurant. ABC Profit Factors and total item operating profits showed that Plow Horses produced a larger share of the total negative operating profit, while Dogs as a whole contributed less to the total loss of the dinner menu. This important finding could not have been discovered without the application of ABC methods. Therefore, the approaches that were suggested above under a traditional CMME method are not feasible. Instead, all Plow Horses need to be eliminated immediately from this restaurant's menu.

Finally, the CM analysis identified five items as Stars, while the ABC approach only classified three items as Stars (see Table 3). All items on the menu should preferably be Stars. Management should concentrate on maintaining existing Stars as well as promoting other items to try to make them into Stars. Management needs to enforce strict quality control for Stars and should locate them in a highly visible position on the menu. Stars are usually not price sensitive and can be tested for price inelasticity. Customers may be willing to pay more for some Stars and an increase in price for these items can raise profits dramatically. A Star's profitability can also be increased by strictly controlling costs. In addition to controlling product costs, the costs for receiving, storing, processing, and serving Stars should be analyzed (Bell, 2002). However, in contrast to the CMME analysis, which showed a high relative profitability for all Stars, ABCME analysis revealed that only one Star (Filet Mignon) was truly profitable while the other Stars displayed less than average profitability.

In conclusion, while the CM menu engineering analysis shows a gross profit, the ABC menu engineering approach reveals that, in reality, the dinner menu contributes to a negative operating profit for the restaurant in this study. This reflects the restaurant's relatively high overhead costs, and particularly its high labor costs. In this case, the entrées' actual

costs are higher than their menu prices, if analyzed using ABC methods. Therefore, every time an entrée was sold with exception of the three items that were classified as Stars, the restaurant suffers an operating loss.

This study further suggests that applications of menu profitability analyses that go beyond the simple analysis of food costs are very appropriate for the restaurant industry. Restaurant managers cannot make reliable decisions without complete cost information, which emphasizes the need for ABC menu analyses. Thus, it is likely that a restaurant manager's menu management decisions will differ dramatically if he or she is confronted with differing results from a CM menu engineering analysis and an ABC approach. This study also suggests that ABC methods applied in the restaurant industry allow for greatly improved financial analyses that incorporate more precise and complete cost information.

Although the results of this study were encouraging, several limitations must be noted. First, the study is an exploratory one and used a convenience sample of only a single restaurant in the USA. Thus, it cannot be widely generalized for all restaurants. Second, it only conducted an ABC examination with the part of the organization that was responsible for the dinner shift. Management should also conduct ABC Menu Engineering analysis for other meal periods in order fully to investigate all possible reasons for the restaurant's low profitability levels. In addition, management should conduct a price sensitivity analysis in order to learn about possible price elasticity patterns for the dinner menu. That information could then be combined with ABC data to result in an Activity-Based Pricing model that develops a clear relationship between true product costs and market demand for this restaurant.

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CONSUMERS LIKELY TO CHOOSE ETHNIC FOODS WHEN EATING OUT: TARGETING THE RIGHT CUSTOMER

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ABSTRACT

The consumption of ethnic foods by U.S. consumers continues to increase. This study identifies consumer segments most likely to choose ethnic foods when eating out from a statewide survey of 825 respondents. Independent t-test and One-way ANOVA determined significant differences in consumers' likelihood to choose certain ethnic foods based on their frequency for eating out and socio-economic characteristics. From the analysis of means, a consumer profile based on certain demographic and socioeconomic characteristics for each of the ethnic foods was ascertained. Implications for industry practitioners are discussed.

Key Words: ethnic foods, eating out trends

INTRODUCTION

As trends for eating out have increased, restaurant diversity has also increased with more restaurants specializing in the preparation of distinctive foreign cuisines (Kepes, Brooks, & Isenberg, 2001). According to NRA's 2002 Forecast, consumers are showing a rising interest in ethnic cuisine ("NRA", 2002). Food industry reports indicate that ethnic cuisine is one of the hottest restaurant trends and predictions are that this trend will continue to increase (Buzalka, 2001; Heller, 2004; Martell, 2004; "Menu", 2000). Through greater understanding of consumer interests in ethnic foods, restaurant operators can better meet the needs and wants of customers and target specific consumer segments while at the same time improve their profitability.

LITERATURE REVIEW

Due to the recent popularity and success of ethnic cuisine, numerous ethnic concepts are expanding in the United States (U.S.). Walkup (2004) and Josiam and Monteiro (2004) describe the popularity and diverse appeal of Indian restaurants across the country. Pan-Asian concepts (Hayes, 2004) and fast-casual Basque cuisine (Spector, 2004) are expanding in the U.S. Major metropolitan areas are not the only places where ethnic food restaurants are becoming increasingly popular. Ethiopian, Vietnamese, Thai, Pakistani, Japanese, French, Chinese, and Hispanic cuisine are thriving even in smaller midwestern cities like Madison, Wisconsin and Dayton, Ohio (Heller, 2004; Martell, 2004). A variety of ethnic restaurants have opened in Lawrence, Kansas (Lawhorn, 2003) and Allentown, Pennsylvania (Gottshall, 2004). Currently, Italian, Mexican, and Cantonese-Chinese cuisines are the most popular among Americans of all ages ("New Survey", 1995) and have become so ingrained in our culture that they are "no longer foreign to the American palate" (Major, 2002). Italian food in particular has become so familiar to American diners and become so thoroughly assimilated that its designation as ethnic food has almost been lost (Kruse, 2004).

Warde, Martens, and Olsen (1999) study found certain factors, such as the frequency a person eats out, increased the likelihood an individual would eat at other ethnic restaurants as well. Their study also found a positive association between the frequency of eating in a wide range of ethnic restaurants and income, education, and social class. Jamal (1996) stated that while many researchers focus on assimilation as the reason for increasing ethnic food consumption that, in addition, there is an acculturation process occurring as well. Backstrom, Pirttila-Backman, and Tuorila (2003) argued that the acceptance or rejection of new foods is based upon the amount of perceived risk involved. In their study, focus groups were most accepting of ethnic foods because "they have already been 'safety tested' in another culture and are thus safe to eat."

Another study found that reasons for selecting ethnic restaurants could be divided into three distinct categories ("New Survey", 1995). The first category, culture-oriented, described those who were actively looking for exotic dining experiences. Equally divided between genders, diners tended to be well educated, employed in a managerial/professional occupation, and have a higher than average income. Restaurant-oriented described those who perceived ethnic restaurants as merely another dining-out alternative. Typically, they were less experimental than culture-oriented diners and looked for a comfortable atmosphere with value prices. Finally, preparation-oriented consumers tended to have an interest in ethnic cooking and food ingredients. The ethnic restaurant provided a culinary expedition. This group was primarily female

(73%), older, and more health conscious. They tended to patronize restaurants less frequently and characterize themselves as “above average cooks” (“New Survey”, 1995).

In May 1999, the NRA surveyed 1,230 U.S. consumers of ethnic foods in order to study comparisons in awareness and usage of various ethnic cuisines. It determined eight segments of appeal: 1) Traditional Italian, basic Mexican and Cantonese Chinese represented the “safe” core of the ethnic-cuisine market. 2) French and upscale Italian attracted an older urban clientele and were perceived as good for formal or social occasions, indulgent foods and irresistible desserts. 3) German, Scandinavian and Greek cuisines were perceived as rich foods, hearty, and not difficult to prepare at home. This segment was losing interest, especially among younger consumers. 4) Japanese and Middle Eastern cuisines appealed to younger, upscale consumers and were considered difficult to prepare at home. 5) Indian, Korean, Thai, and, to a lesser degree, Vietnamese and Chinese appealed to adventurous eaters, were characterized as hot and spicy with unique flavors, and were difficult to prepare at home. 6) Chinese, other Asian cuisines, as well as Mexican food appealed to consumers needing convenience, great value, carryout and vegetarian dishes. 7) Festive appeal was found in Mexican, Cajun/Creole, Caribbean and Spanish and was characterized by being good for celebrations; hearty portions; and hot, spicy food. 8) Upscale Italian, French, and Spanish cuisines were perceived to be innovative and trendy (Mills, 2000). According to a study by the NRA, Generation X and Y (ages 18 to 34) are leading the insurgency on ethnic cuisine dining. This group is inherently adventurous and is driven to ethnic cuisines by past experiences. Both Generation X and Y, the study found, were exposed to various ethnic cuisines at an early age by their parents and do not consider it experimentation. They are not intimidated by food that is new and different when dining out, are comfortable with exotic cuisines like Thai, Indian, Vietnamese and sushi, are actively seeking spicy foods, and demand food authenticity. On the other hand, seniors do not frequent ethnic establishments despite being social diners who eat out often. When older individuals choose ethnic cuisine, they are far more likely to opt for Italian, Mexican and Cantonese-Chinese. Additionally, according to the NRA survey, seniors avoid foods that are spicy or exotic like Indian, Thai or Vietnamese, or newer trends, such as fusion cooking and place little importance upon trying new cuisines (“NRA News”, 2000).

METHODOLOGY

The population of the study was residents of Kentucky who were at least 18 years of age. A telephone survey was conducted from December 6, 2002 to February 2, 2003, and yielded 825 interviews. The total number of households contacted was 2,662, for a total response rate of 31.0%. The sample was obtained by using a random-digit dialing procedure for contacting non-institutionalized adults. The system utilized an automatic scheduling algorithm of Computer-Assisted Telephone Interviewing (CATI), which ensured that phone numbers were attempted at different hours on different days until contact was made. Socio-demographic data of the respondents was obtained. For the purpose of this study, data from two of the survey questions were analyzed: 1) Consumers typical weekly frequency for eating out using the following scale: 1=never, 2=less than once a week, 3=1-3 times a week, 4=4-6 times a week, 5=7-10 times a week, and 6=more than 10 times a week. 2) Participants likelihood for ordering specific types of ethnic foods when eating out using a Likert-type scale of 1=very likely to 5=very unlikely. Ethnic food choices included Italian, Mexican, Chinese/Asian, Caribbean, American, Greek, Indian/Mideastern, German, French and the category “Other”. Data was analyzed using SPSS software 12.0 for Microsoft Windows.

RESULTS AND DISCUSSION

Of the total sample, slightly more than half of the respondents were female. Slightly less than half of the respondents were 45 years old or younger, with the largest group (22.2%) being 36-45 year olds. More than half (55.6%) of the respondents were employed full-time and about a quarter (23.8%) were retired. A large majority of the respondents were white (89.9%), with the next largest racial/ethnic group was African American (5.5%). Slightly more than one-third of the respondents lived in a small town (37%) or suburb/city (35.5%) and 27 percent lived in a rural area. A majority of the respondents (87.1%) had at least a high school education and about one-third had attained a high school degree as their highest level of formal education. Almost one-third had a bachelor’s degree or higher. The largest occupational group was respondents who were in a professional/specialty line of work (19.5%) followed by technicians/sales/ administrative occupations (15%). Before-tax annual household income ranged from less than \$20,000 to \$70,000 or more, with almost 40% of the respondents having an annual income between \$30,000 and \$69,999.

One-way ANOVA analysis was performed to identify significant differences in respondents’ likelihood to choose ethnic food based on their eating out frequencies. As shown in Table 1, the likelihood for choosing Italian, Mexican, American, and “other” foods when eating out was found to be statistically significant when compared to respondents’

eating out frequencies. This finding was not significant when choosing Chinese, Caribbean, Indian, German, French, and Greek foods.

Table 1
One-way ANOVA Analysis of Consumers' Likelihood for Ethnic Food based on Their Eating Out Frequency

Dependent Variables	Independent Variables	N	Mean	Std. Deviation	F	Sig.
Likelihood of Italian food	<1 time	82	2.96	1.621	2.847	.037
	1-3 times	440	2.62	1.580		
	4-6 times	164	2.46	1.416		
	>=7times	87	2.33	1.460		
	Total	773	2.59	1.543		
Likelihood of Mexican food	<1 time	82	3.27	1.618	4.655	.003
	1-3 times	439	2.70	1.589		
	4-6 times	163	2.53	1.504		
	>=7times	87	2.51	1.584		
	Total	771	2.70	1.585		
Likelihood of American food	<1 time	82	1.43	.956	2.712	.044
	1-3 times	438	1.40	.894		
	4-6 times	162	1.25	.643		
	>=7times	87	1.18	.540		
	Total	769	1.35	.823		
Likelihood of "Other" ethnic food	<1 time	71	4.62	.868	2.657	.047
	1-3 times	383	4.19	1.285		
	4-6 times	137	4.20	1.307		
	>=7times	77	4.10	1.363		
	Total	668	4.23	1.267		

An independent t-test and One-way ANOVA were conducted on the different ethnic food choices based on the respondent's demographic and socioeconomic characteristics to determine if there were different ethnic food preferences when eating out based on consumers' characteristics. Those characteristics with statistically significant F or t values and significance (*p* value) are shown in Table 2. Respondents' race was significant for likelihood to choose an ethnic food for all ethnic food types except Italian and American; education was significant for all food types except German and "Other". Respondents' place of residency was significant for six of the nine ethnic food types: Italian, Mexican, Chinese/Asian, Caribbean, American, and Greek. Age was significant for four of the nine food types: Italian, Mexican, Indian/Mideastern, and German. Occupation was significant for four ethnic food types: Italian, Mexican, Chinese/Asian, and American. The respondents' employment status was significant for only those individuals choosing Italian and Mexican food.

An analysis of the means for the likelihood of choosing different ethnic foods is shown in Table 3. From this analysis, a consumer profile based on certain demographic and socioeconomic characteristics for each of the ethnic foods can be ascertained. Survey respondents significantly more likely to choose Italian food when eating out were females and 26-35 years old. Consumers living in the suburbs or city preferred Italian food more than people in small towns and rural areas, as did respondents with a bachelor's degree more than respondents with graduate school education or an advanced degree, some college education, high school education and below high school education. Full-time working respondents chose Italian food more than part-time working or unemployed respondents or retired individuals. People who worked in a professional specialty preferred Italian food more when compared with other occupations. And finally, respondents with the highest household income, \$70,000 or above were more likely to choose Italian food than people with lower income levels.

Table 3 shows that the respondents choosing Mexican food when eating out were similar to respondents choosing Italian food – they were significantly more likely to be female and 26-35 years old. "Other" ethnic people (multiracial, American Indian, Indian, and Asia) were more likely to eat Mexican food than whites and African Americans. Consumers living in the suburbs and city preferred Mexican food more than consumers living in small towns and rural areas. Full-time workers chose Mexican food more than respondents working part-time or unemployed and retired, as did people who worked in a professional specialty when compared with other occupations. The likelihood of choosing Mexican food increased with respondents' education and household income level. Respondents with graduate school education or above

and with household incomes of \$70,000 or above were more likely to choose Mexican food than those with lower levels of education and income.

Table 2
Analysis of Likelihood of Ethnic Food Based on Respondents' Demographic Characteristics

Likelihood of Ethnic Food	Gender		Age		Race		Residency	
	t Value	Sig.	F Value	Sig.	F Value	Sig.	F Value	Sig.
Italian	1.993	0.047	11.522	0.000			9.984	0.000
Mexican	2.056	0.040	15.296	0.000	5.919	0.003	3.372	0.035
Chinese/Asian					7.517	0.001	10.349	0.000
Caribbean					18.801	0.000	3.111	0.045
American							9.378	0.000
Greek					10.940	0.000	4.935	0.007
Indian/Mideastern			2.600	0.024	6.449	0.002		
German	-2.335	0.020	3.726	0.002	6.995	0.001		
French					8.544	0.000	3.425	0.033
Other					10.310	0.000		
Likelihood of Ethnic Food	Education		Employment		Occupation		Household Income	
	F Value	Sig.	F Value	Sig.	F Value	Sig.	F Value	Sig.
Italian	4.971	0.001	11.369	0.000	2.247	0.049	2.951	0.020
Mexican	4.024	0.003	12.231	0.000	2.716	0.020	3.522	0.007
Chinese/Asian	7.753	0.000			3.307	0.006	5.44	0.000
Caribbean	3.063	0.016						
American	12.299	0.000			4.716	0.000		
Greek	4.754	0.001						
Indian/Mideastern	3.295	0.011						
German								
French	2.989	0.018						
Other								

Significant differences were found between race, place of residency, level of education, occupation and household income for those respondents likely to choose Chinese/Asian food when eating out. Respondents identifying themselves as "other" ethnics were more likely to choose Chinese/Asian food than whites and African Americans. Consumers living in the suburbs or city were more likely to desire Chinese/Asian food than consumers living in small towns and rural areas. Respondents' with a bachelor's degree had the highest preference for eating Chinese food, while respondents with a high school education or less tended to be least likely to choose Chinese food. Respondents who occupied a professional specialty or with a household income of \$70,000 or above chose Chinese/Asian food more than other occupations or other levels of household income.

Regarding the likelihood of choosing American food when eating out, significant differences were found between place of residency, education and occupations (Table 3). Differentiating from other ethnic foods, the respondents most likely to choose American food lived in rural areas, followed by those respondents living in small towns and the suburbs or city. Respondents with less than a high school education were the most likely to prefer American food, and people with a bachelor's or advanced degree were least likely to prefer it. People working in a professional specialty area were least likely to desire American food compared to people in occupations such as technical, machine/equipment or service who were the more likely to prefer American food.

When choosing what food to eat at restaurants, respondents were somewhat less likely to prefer Caribbean (Mean=4.50), Greek (Mean=4.37), Indian (Mean=4.42), German (Mean=4.11), French (Mean=4.29), and "other" foods (Mean=4.23). Table 3 shows the means for the demographic and socioeconomic characteristics for each of these six ethnic

food types. African Americans were less likely to prefer Caribbean, Greek, Indian, German, or “other” foods than were whites, followed by “other” ethnic people.

Table 3
The Mean of Likelihood of Ethnic Food Based on Respondents' Demographic Characteristics

Variables		Italian	Mexican	Chinese	Caribbean American	Greek	Indian	German	French	Other
Gender	Male	2.712	2.831					3.989		
	Female	2.419	2.596					4.217		
Age	≤25	2.492	2.646				4.286	4.234		
	26-35	2.113	2.157				4.288	4.347		
	36-45	2.367	2.435				4.491	4.263		
	46-55	2.536	2.661				4.261	3.804		
	≥56	3.188	3.376				4.624	4.017		
Race	White		2.676	2.815	4.544	4.400	4.449	4.115	4.336	4.253
	African American		3.452	2.952	4.714	4.619	4.690	4.619	4.119	4.538
	Other		2.125	1.200	3.000	3.063	3.500	3.188	3.125	2.867
Place of Residency	Rural	2.870	2.880	3.067	4.635	1.212	4.481		4.318	
	Small town	2.698	2.746	2.910	4.511	1.287	4.473		4.155	
	Suburb/City	2.281	2.516	2.441	4.396	1.513	4.192		4.292	
Education	<High school	3.039	3.000	3.440	4.616	1.171	4.493	4.432		4.356
	High School	2.789	2.956	3.012	4.650	1.209	4.577	4.540		4.466
	Some college	2.417	2.568	2.550	4.455	1.215	4.317	4.554		4.262
	Bachelor's degree	2.270	2.474	2.387	4.289	1.620	4.044	4.255		4.156
	Grad school	2.523	2.458	2.636	4.462	1.654	4.311	4.160		4.038
Employ Status	Full-time	2.379	2.507							
	Part-time/Unemployed	2.755	2.566							
	Retired	3.180	3.343							
Occupation	Executive	2.395	2.526	2.421		1.355				
	Professional specialty	2.117	2.195	2.405		1.627				
	Tech/sales support	2.375	2.583	2.833		1.248				
	Machine/equip/prod	2.727	2.831	3.221		1.247				
	Service occupations	2.483	2.862	2.737		1.228				
	Other	2.750	2.458	2.750		1.083				
Household Income	≤19,999	2.709	3.051	3.282						
	20,000-29,999	2.786	2.726	2.524						
	30,000-49,999	2.631	2.669	2.769						
	50,000-69,999	2.440	2.513	2.580						
	≥70,000	2.212	2.356	2.438						

Whites were less likely to choose French food than were African Americans or “other” ethnic respondents. Consumers living in rural areas were less likely to choose Caribbean, Greek and French food than consumers living in small towns and suburbs or city. Respondents with a high school education or less were less likely to choose Caribbean, Greek and French food than were those with more education. Respondents 56-89 years of age were less likely to choose Indian food; those younger (26-45 years old) were less likely to choose German food. Lastly, females were less likely to choose German food than were males.

DISCUSSIONS AND IMPLICATIONS FOR THE RESTAURANT INDUSTRY

This study supports the belief that Italian, Mexican and Chinese/Asian foods are becoming part of the mainstream American food culture ("New Survey", 1995; Major, 2002; Mills, 2000). In the current study, all eight of respondents' demographic and socio-economic characteristics were significant for likelihood to choose Mexican food; seven of eight characteristics were significant for likelihood to choose Italian food; and five of eight characteristics were significant for likelihood to choose Chinese/Asian food. Others report that younger adults, like Generation Xers, are drawn to rich flavors found in ethnic cuisine and are more likely to consume certain ethnic foods, like Indian food, than baby boomers or teens. The study supports this notion. It found that respondents who were 35 years of age or younger were more likely to choose Indian food than older participants. It also supports previous author's opinion ("NRA News, 2000) that older individuals are more likely to choose Italian or Mexican food when eating out. This study supports other author's beliefs (Mills, 2000) that Old-World Traditional foods, like German cuisine, are losing interest, especially among younger consumers.

This study, like in Warde, Martens, and Olsen's study (1999) and culture-oriented diners in the Frozen Food Digest study (1995), found a positive association between the frequency of eating in a wide range of ethnic restaurants and a person's level of education. Respondents' education was significant for likelihood to choose ethnic food for all ethnic food types except German and "Other". According to the NRA study, Generation X and Y (ages 18 to 34) are heavy users of ethnic cuisine dining. This study found that individuals 18 to 35 were more likely to choose certain ethnic foods, as were 36-45 year olds, than older respondents. In addition, individuals with more education, income and who work in professional and executive occupations chose ethnic foods more often than those who are less educated, with lower incomes, and work in technical or machine/production occupations. Generally, those individuals have less discretionary income, supporting Backstrom, Pirttila-Backman, and Tuorila's (2003) argument that the acceptance or rejection of new foods is based upon the amount of perceived risk involved.

The current research provides restaurant operators important information on which consumers are more likely to choose ethnic foods and which types of ethnic foods most appeal to specific consumer groups. This information can be used by restaurateurs to target specific consumer segments through ethnic menu offerings. Operators informed about consumer decisions are able to target their marketing strategies, making their efforts more compelling and efficient. Americans continue to have busy and diverse lifestyles requiring restaurants to provide food and atmosphere that meet consumers wants and needs for convenience, time to spend with family and friends, places to celebrate special occasions, and foods they cannot or do not want to prepare at home. Understanding and meeting these needs are essential for any successful foodservice operation. Leveraging these current lifestyle trends by providing ethnic foods that consumers desire plays an important role in restaurant menu planning in the 21st century.

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COLLEGE AND UNIVERSITY FOOD SERVICE ADMINISTRATORS PERCEPTIONS OF TECHNOLOGY

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ABSTRACT

The purpose of this study was to identify the perceived importance and satisfaction for technology currently adopted in college and university foodservices. A self-administered electronic questionnaire was utilized and data was analyzed using descriptive statistics and exploratory factor analysis. The majority of the college and university foodservice administrators showed positive attitudes toward technology, used technology at home, work, and traveling, and training was usually received from in-house sources, fellow workers, and self-study. A gap between the perceived importance and satisfaction level of information technology applications was identified, and respondents were not satisfied with the technology currently used in their organizations.

Key Words: Technology Adoption, University Food Services.

INTRODUCTION

The use of information technology applications is flourishing and gaining operational emphasis in the institutional foodservice segment, including college and university foodservice systems. As the organizational use of information technology proliferates, and as technology becomes more critical for competitive advantage, the role of technology can be influential in the present competitive situation. Therefore, foodservice operators and administrators will need to include information technology in a set of strategic tools for controlling, simplifying, delegating, and reducing job-related tasks to maximize their current operational capacity. Just accepting some existing affordable or university-wide standardized technology options may not be adequate. Understanding how individuals form overall perceptions of technological innovations would help technology implementers, vendors, and users in their evaluation, selection, and continuous use of the applications. The purpose of this study was to identify the perceived importance and satisfaction level of a wide range of information technology applications currently adopted in college and university foodservice operations, as perceived by foodservice administrators. This study was a census comprised of voting delegates of the National Association of College and University Food Services (NACUFS) and respondents were not asked to evaluate a particular information technology (IT) based on its specific version, operating system, and manufacturer.

LITERATURE REVIEW

Information Technology (IT) is defined as the hardware, software, and telecommunications that create, store, retrieve, exchange, transform, analyze, and communicate data and information around the globe (Kudyba & Diwan, 2002). It entails the broader technological innovations and applications used in daily business operations. Information technologies have a tremendous potential to transform the nature of work and organizations and the way they conduct business. There are many ways in which information technologies can help organizations achieve higher levels of quality in their products, services, and operations. Today organizations are faced with an increasingly complicated environment where pressures for quality information are dominant for remaining competitive (Collins, 1994). Advances in information technology have set the pace for tremendous growth in the development of technological innovations assisting today's organizations in achieving competitive advantages. Agarwal and Karahanna (2000) addressed that the actual value of information technology comes to be realized only when information systems are utilized by their intended users in a manner that contributes to the strategic goals of the organizations.

According to Agarwal and Prasad (1997), having the technology available is not enough; it must be accepted and used appropriately by its target user group in order to realize anticipated productivity gains. Systems that are not accepted by their committed users will not result in any sought-after benefits and advantages (Agarwal & Prasad, 2000). As individuals are willing to accept and employ the systems, they are empowered with the ability to fully utilize the technology systems. Thus, in order to construct strategic planning of purchasing and implementing information technology in

foodservice operations, understanding how individuals perceive technology applications is increasingly crucial for foodservice administrators as well as technology manufacturers and suppliers.

A number of studies associated with explaining and predicting the adoption of new information technologies have been completed that focus on individual user's technology acceptance behavior. Among those research topics in this area, the perceived characteristics of an innovation as a determinant of intentions to use existing technology applications as well as to accept new technological innovations was examined (Agarwal & Prasad, 1997; Moore & Benbasat, 1991). Theoretical backgrounds of the individual innovation characteristics were based on the diffusion of innovation (Rogers, 1983), Technology Acceptance Model (TAM) (Davis, Bagozzi, & Warshaw, 1989) and the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975). The Technology Acceptance Model (TAM) is primarily based on Fishbein and Ajzen's theory of the reasoned action model, which is based on a person's beliefs about the consequences of performing a behavior (Davis, 1989).

Numerous studies conducted over the last decade to explain and predict individual user's innovation characteristics and usage/adoption behavior (i.e., Brancheau & Wetherbe, 1990; Chiasson & Lovato, 2001; Moore & Benbasat, 1991; Premkumer & Potter, 1995). The theoretical models used in these studies are primarily based on Rogers (1983) and Moore & Benbasat's (1991) models, which measure the perceptions of adopting information technology innovations using successfully tested psychometric properties. However, only a few studies have attempted to encompass a wide range of variables applied in different contexts. Moreover, there has been little large-scale empirical research on individual factors influencing the use of information technology in the context of any foodservice operations. In order to develop a new framework applicable to the institutional foodservice setting, this study included perceived compatibility and perceived voluntariness from Moore & Benbasat (1991) and attempted to incorporate additional determinants of the behavior of individual, perceived innovativeness and perceived technology awareness. The theoretical construct related to user perceptions of technology has provided critical implications in influencing adoption and diffusion of innovation.

METHODOLOGY

The population for the study was the voting delegates of the National Association of College and University Food Services (NACUFS), a volunteer professional association which represents independently operated college and university foodservices. The voting delegates are the individuals in the foodservice operations who would normally have responsibility for supervising many aspects of the campus food service. The survey included questions related to general technology-related behavior, including past experience with computers and the Internet, computer and Internet use at home, technology use at work and while traveling, past technology learning opportunities, perceived level of technology expertise, and perceived importance of technology in campus dining operations. In addition, the questionnaire listed 29 information technology (IT) applications, which are currently adopted in college and university foodservice operations. In this section, participants were asked to evaluate the perceived importance of the 29 technology application attributes, and were also required to rate the satisfaction level of the same 29 technology applications. The information technology attributes were carefully selected, based on previous studies (e.g., Garand & McCool, 1985; Grover & Goslar, 1993; Jones & Berry, 2000; McLean, et al., 1993; Miller, 1989; O'Hearn, 1998). Demographic questions that dealt with gender, age, race/ethnicity, highest degree earned, current position, total current annual income, and experience in college and university foodservices.

Descriptive statistics were used to determine frequency distribution for a demographic profile of participants and institutions and individual perceptions of technology. In order to address the perceived importance and satisfaction level of the technology attributes by college and university foodservice administrators, the means and standard deviation were calculated. Items of the administrators' evaluations based on satisfaction level were factor analyzed using principal component analysis with orthogonal VARIMAX rotation, to delineate the underlying dimensions. Items with factor loadings of 0.40 or higher were clustered together to form constructs, as recommended by Hair et al. (1998). A reliability alpha (Cronbach's alpha) was computed to check the internal consistency of items with each dimension. The Correlation Matrix, Bartlett's Test of Sphericity, and Measure of Sampling Adequacy were used to assess the appropriateness of applying a factor analysis.

RESULTS AND DISCUSSION

A total of 639 surveys were distributed to the voting delegates of the National Association of College and University Food Services (NACUFS). Of this, 568 surveys were sent via email and asked to visit the website and 71 surveys were sent via regular mail. Within the 568 surveys sent via email, 117 (20.6%) were undeliverable due to a spam / system blocker or incorrect email addresses (email addresses were checked for accuracy just prior to distribution of the

invitation to participate). This yielded an effective response of 451 for the web-based survey method and 71 for the mail survey method. The unusable responses were eliminated before data analysis.

Fifty nine percent of the respondents were male, while 41% were female. The main age group was 40-49, representing 44.9% of the respondents. The majority of the respondents were Caucasian/Euro American (88.3%). Slightly more than half of the respondents held a bachelor's degree and 24.9% held a master's degree. The majority of the respondents were directors/general managers (77.3%). The most frequent level of current annual income for a college and university foodservice administrator is \$70,000 or more (52.2%), followed by \$60,000 to \$69,999 (16.8%). As for the total years of experience working in college and university foodservices, respondents with above 20 years of experience (37.7%) dominated the population. The respondents were fairly distributed across various institution type, institution location, NACUFS membership classification, total annual foodservice revenue, and total enrollment. Approximately 79% of the institutions were public (78.5%), while 21.5% of the institutions were private. The most frequent location of colleges and universities reported by the respondents was urban (38.5%). There was a wide distribution of institutions ranging from relatively small institutions (10.2%) with self-reported total annual foodservice revenue up to \$500,000 to large institutions (30.2%) having over the annual foodservice revenue of \$10,000,000 annually, and 42.2% of the institutions had more than 10,000 students.

The total years using a computer at work, the 11-15 years category was dominant (33.8%), followed by 16-20 years (30.0%) and 5-10 years (22.7%). Approximately 76% of the respondents had the total years of having an Internet access at work 5 to 10 years (75.8%). Most of the respondents used a computer (94.7%) and the Internet (87.9%) at home. Approximately 55% of respondents indicated that they had an average level of computer and Internet expertise (54.9%). More than half of the foodservice professionals (53.9%) reported that computer and Internet is very important in today's dining operations. Most of the college and university foodservice administrators used Internet and email (82.6%) and floppy disc, CD-ROM, and local hard drive (82.6%) to access work-related computer software at home. More than half of the respondents (58.7%) were not using laptop computers at home, while more than half of the respondents (52.2%) used a laptop computer while traveling for their technology needs. Most of the respondents did not utilize user support facilities or information centers outside their workplace, such as Internet café, business center, or public libraries, neither at home (87.9%) or while traveling (73.4%) to access task-related information outside the workplace. The majority of respondents used a PDA and cellular phone both at home (76.1%) and while traveling (77.4%) for their communication needs.

There was almost an equal distribution of respondents who experienced (52.2%) and did not experience (47.8%) technology learning chances through formal courses at a college or university. Most of the respondents received technology learning opportunities from self-study or self-taught (89.9%), in-house company course (83.1%), and fellow workers (74.4%). Approximately 35% of the respondents had some prior technology learning opportunities from their supervisors (34.8%) in the workplace, while 65.2% of them did not. Nearly 77% of the participating college and university foodservice administrators did not receive any opportunities to learn about technology using a distance learning (e.g., on-line learning) system via Internet or other communication technologies.

All 29 technology attributes currently adopted in the college and university foodservice operations had a mean score higher than 3.0, ranging from 3.36 to 4.95. The standard deviations of those attributes ranged from 0.23 to 1.13 and did not show a large variation of the opinion among the respondents. The top three most important attributes were "email" (4.95), "personal computer" (4.90), and "order entry/ point-of-sale (POS)" (4.75), indicating the importance of these attributes. "Personal digital assistant (PDA)" (3.36), "ingredient room issues software" (3.53), and "statistical analysis package" (3.73) were perceived as the least important attributes. The mean ratings of the perceived satisfaction level of the same technology attributes were also calculated. The results are based on the rankings of mean scores. It was shown that the mean scores for all 29 technology attributes, currently adopted in the college and university foodservices, ranged from a high of 4.51 to a low of 2.91. The range of the standard deviation of the technology attributes was from 0.62 to 1.30.

Twenty-nine technology attributes based on the satisfaction level were factor analyzed with VARIMAX rotation procedure to condense the information contained in those attributes. Two statistics were used to test if the factor analysis was appropriate for this study. First, the Kaiser-Meyer-Olkin (KMO) overall measure of sampling adequacy (MSA) was 0.851, which was considered meritorious (Hair et al., 1998). Second, the overall significance of the correlation matrix was 0.0000 with a Bartlett Test of Sphericity value was 1900.825. These measures indicated that the variables had good predictive power for the underlying dimensions. All 7 factors had eigenvalues greater than 1.0, accounting for 67.90% of the total variance. The reliability coefficients for the items in the study ranged from 0.62 to 0.95, above the minimum value of 0.50 that is considered acceptable as an indication of reliability for basic research (Nunnally, 1967).

The first dimension was labeled "Foodservice Operation" which explained 19.75% of the total variance with a reliability coefficient of 0.95. The second dimension was labeled as "Daily Use" which accounted for 9.74% of the total variance with a reliability coefficient of 0.76. The third dimension labeled as "Documentation" accounted for 8.81% of the variance with a reliability coefficient of 0.81. The fourth dimension labeled as "Student Services" accounted for 8.06% with a reliability coefficient of 0.86. The fifth dimension was labeled as "Administration" which accounted for 8.02% of the total variance with a reliability coefficient of 0.84. The sixth dimension labeled as "Information Exchange" accounted for 7.89% of the variance with a reliability coefficient of 0.83. The final dimension labeled as "Communication" accounted for 5.63% with a reliability coefficient of 0.62.

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

The majority of the college and university foodservice administrators showed relatively positive attitudes and perceptions towards computer/Internet. More specifically, most of the participating college and university foodservice administrators used a computer and Internet access at home. Approximately 85% of the administrators evaluated their own computer/Internet expertise average or higher. In addition, the majority of the respondents thought computer/Internet is very important or extremely important in today's campus dining operations. Not surprisingly, none of the respondents indicated that computer technology is not at all important or slightly important in their foodservice operations.

As for the methods to access work-related software outside the workplace, such as at home and while traveling, most of respondents utilized Internet/email, different types of disk drive (floppy disc and CD-ROM), and a PDA/cellular phone for their communication needs. Surprisingly, a significant proportion of the participating college and university foodservice administrators didn't use a laptop computer to access work-related information at home and while traveling. In addition, most of the respondents did not prefer to visit various types of technology user supporting facilities (e.g., business center, public library, Internet cafe) at home and while traveling.

With respect to their prior technology learning experiences, most of the respondents received their technology learning opportunities from in-house company courses, fellow workers, and self-study or self-taught, while only a small proportion of them received technology learning opportunities from supervisors and distance learning. Unexpectedly, about half of the college and university foodservice administrators didn't have opportunities to learn about technology in formal courses at a college or university.

The top three most important attributes were "email", "personal computer", and "order entry/ point-of-sale (POS)." Similarly, the top three most satisfied attributes were "personal computer", "email", and "Internet/ Web browser", as perceived by the college and university foodservice administrators. The grand mean was 4.33 for importance and 3.72 for satisfaction ratings. Overall importance values exceeded satisfaction values in 28 of the total 29 technology attributes. This indicated that, overall, college and university foodservice organizations did not usually offer satisfactorily advanced and sophisticated information technology (IT) applications to the administrators for their enhanced job-related tasks.

This study investigated the human-aspects of information technology related to individual perceptions and organizational environments. First, this study identified a demonstrated relatively considerable gap between the perceived importance and satisfaction level of information technology applications. The findings have critical implications for university administration, technology vendors/marketers, and higher educational institutions. For higher educational institutions, surprisingly, about half of the participating college and university foodservice administrators didn't receive any learning opportunities regarding technologies through formal courses at a college or university. Approximately 77% of the respondents were not exposed to distance learning opportunities. That implied that there was much room for developing an educational or certificate programs in the areas for foodservice professionals, including, managerial-level professionals, staff assistants, and frontline employees in a wide range of foodservice organizations.

Thus, a set of related parties, university administration, technology vendors/marketers, and higher educational institutions can utilize findings of this research in developing favorable computing environments which would improve and develop the needs for college and university foodservice professionals as well as the potentials of campus dining operations in the industry's competitive situation. This study provided new insights into the importance and satisfaction of technology used in the institutional environment. Unfortunately, they were not satisfied with the information technology (IT) applications currently adopted in their organizations. University administration should focus on IT applications related to the core functions of campus dining operations, such as foodservice/nutrition software packages and cafeteria operation package, rather than overspending resources in relatively standardized IT applications, such as CD/DVD ROM and fax machines.

In conclusion, the foodservice industry is highly competitive, as the products and facilities are relatively homogenous compared with various types of establishments in the foodservice industry, particularly commercial foodservice organizations. What differentiates one setting from another is not only the actual services and products, but also the quality of services and products provided by foodservice professionals. To ensure patronage from the “captive” campus dining customers versus outside commercial foodservices, all aspects of the quality of foodservice outcomes should be thoroughly and consistently maintained by providing “well-updated” and “well-compatible” information technology (IT) applications.

Qualitative inquiry fits to develop an initial understanding and sound pedestal for further decision making, based on the quality, meaning, context, and image of reality in what people actually do. Quantitative analysis could not provide a more in-depth examination of attitudinal changes and behavioral patterns of college and university foodservice administrators regarding technology importance and satisfaction qualitative research could be an effective methodology in the situation. A series of interviews and focus group discussions with the NACUFS annual conference or the National Restaurant Association (NRA) show, for example, would be a method to obtain critical information for building well-structured computing environments for the college and university foodservice professionals.

A future study might replicate this study with different levels of managers and employees in noncommercial foodservices as well as in commercial foodservice segment to discern if perceived similarities or differences exist between managerial level IT users and non-managerial level users and their commercial segment counterparts. Since this study focused on the higher managerial level IT users in the institutional foodservice setting, it could be contributory and meaningful to apply the same conceptual model to different populations within the foodservice industry for multi-level comparisons.

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LOCAL CUISINES IN TOURISM: A MODIFIED THEORY OF REASONED ACTION MODEL

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ABSTRACT

This study proposed a modified theory of reasoned action model in which past behavior was added to the original model. Using the proposed model, this study investigated the interdependence between attitudinal and normative components and also examined the model's ability to predict tourists' behavioral intention to experience local cuisine in a hypothetical situation. A structural equation analysis showed that the model had strong predictive ability on tourists' intention to experience local cuisine. Attitude, subjective norm, and past behavior were found as significant predictors of the tourists' behavioral intention. In addition, the independence between attitudinal and normative components were found.

Key Words: local cuisine, theory of reasoned action, attitude, subjective norm, past behavior, tourists' behavioral intention.

INTRODUCTION

Food is an important component in tourism. A few studies have been dedicated to address food as a significant attraction in tourism (Bessiere, 1998; Cohen & Avieli, 2004; Kale et al., 1987). For instance, Bessiere (1998) suggested that traditional food and cuisine could be excellent tourist attractions in rural travel destinations, and also claimed that eating local cuisine might be an integral part of travel experience since food serve as a part of entertainment and leisure activities. Cohen and Avieli (2004) also agreed that individual cities or even whole countries could be appealed for their unique culinary attractions. In addition, Kale et al., (1987) reported that 'the opportunity to sample local cuisine' was ranked the top out of 30 tour package desires by tourists aged between 18 and 35. In this respect, analyzing tourists' behavioral intention towards local cuisine will provide an insight into their behavior in travel destinations.

This study attempted to address a few key questions. What are the determinants of tourists' intention to experience local cuisine in a holiday destination? Are tourists mainly influenced by personal perceptions or do they also consider important other persons' (e.g., family) expectations for a specific behavior? A review of literature indicates that the theory of reasoned action (TRA) offers a theoretical framework to answer these questions and to provide clear guidance on marketing, operations, and human resource management (Buttle & Bok, 1996). During the past three decades, TRA (Fishbein & Ajzen, 1975) has been successfully applied in predicting intentions and behaviors in diverse research areas such as marketing, psychology, and consumer sciences. "Not only does the theory appear to predict consumer intentions and behavior quite well, but it also provides a relatively simple basis for identifying where and how to target consumers' behavioral change attempts" (Sheppard et al., 1988, p 325).

Despite the fact that the TRA has received considerable attentions in a wide variety of research areas, limited efforts have been made toward the application of TRA to the hospitality and tourism literature. In addition, the interface between food and tourism has been neglected by scholars of both hospitality and tourism. Given the scarcity of research on tourists' local cuisine experience and of the application of the TRA model to the hospitality and tourism research, this study aimed to fill the research gap by using the TRA for local cuisine in a tourist destination. The overall purpose of this paper was to predict tourists' behavioral intention (BI) to experience local cuisine in a holiday destination by examining the relationships among latent variables of the modified TRA. The specific objectives of this paper were: (1) to examine the validity of a modified TRA model in explaining tourists' BI toward experiencing local cuisines in a holiday destination; (2) to investigate the effects of attitude and subjective norm on BI; (3) to examine the effect of past behavior on BI; (4) to test the interdependence between attitudinal and normative structures in the modified TRA model.

THEORETICAL BACKGROUND

Theory of Reasoned Action

The TRA was designed to identify the determinants of an individual's specific behavior in volitional control. The main components of the TRA model consist of attitudinal, normative, and BI variables to predict a behavior (Fishbein &

Ajzen, 1975). The TRA hypothesizes that a person's BI to perform a behavior is the sole predictor of behavior. In turn, BI is determined by an attitudinal (personal) and normative (social) component. The person's attitude toward the behavior (Aact) refers to the personal judgment of being in favor of or against performing the behavior, while the subjective norm (SN) refers to the person's perception of the social pressure to perform the behavior. "For many purposes it may be quite sufficient to explain intentions and behavior by reference to Aact and SN. A deeper understanding of the factors influencing behavior, however, requires that the determinants of the attitudinal and normative components" (Ajzen & Fishbein, 1980, p 62). The first component, Aact is represented as a function of the behavioral beliefs (BB) and outcome evaluation (E). BB refers to the perceived consequences of performing a particular behavior in a given situation and E refers to the evaluation of those consequences. The second component, SN is a function of normative beliefs (NB) and the individual's motivation to comply (MC) with important others. NB refers to what the person believes others think he or she should do in this situation. MC refers to what others think should be done. The relative importance of attitudinal and normative components in predicting BI would vary by the behavior, the situation, and individual differences. For behaviors in which attitudinal or personal influence is strong (e.g., purchasing something for personal consumption only), Aact will be the dominant predictor of BI. For behaviors in which normative implications are strong (e.g., buying something that others will use), SN should be the dominant predictor of BI, and Aact will be of lesser importance (Ajzen & Fishbein, 1980).

Past Behavior

The role of past behavior in the context of the TRA has been tested in a few previous studies. Those studies have shown that TRA model's ability to predict the intentions and/or actual behavior could be enhanced by adding past behavior as predictor of future behavior (Ajzen, 1991; Bagozzi, 1981; Bentler & Speckart, 1979; Ouellette & Wood, 1998). Bentler and Speckart (1979) first realized that a model which included a direct path from past behavior to later behavior generated a significantly better fit to the model than did an original TRA model. Bagozzi (1981) found that the effects of past behavior on intentions were not mediated by attitudes and/or subjective norms, and that prior behavior had direct effects on actual behavior that were not mediated by intentions. Ajzen (1991) claimed that past behavior might be the best predictor of future behavior and a measure of past behavior could be employed to test the sufficiency of any model designed to predict the future behavior. A recent meta-analysis by Ouellette and Wood (1998) examined 64 studies and found robust evidence for the effect of past behavior structure on both behavioral intentions and future behaviors. Based on the findings of previous studies, it was expected in this study that the past behavior could directly affect behavioral intention.

Interdependence between Attitudinal and Normative Components

Some researchers have questioned relationships between the attitudinal and normative components of the model (Vallerand et al., 1992). In deed, a few previous studies have revealed that the attitude and subjective norm components are not as independent as the original TRA model claimed (Oliver & Bearden, 1985; Ryan, 1982). In general, subjective norms have been found to influence attitudes (Chang, 1998; Ryan, 1982; Vallerand et al., 1992). Oliver and Bearden (1985) also demonstrated that crossover effects existed between the attitudinal and normative structures of the model. More specifically, the $\Sigma BB_i MC_j$ multiplicative structure had a causal impact on attitudes. Moreover, Vallerand et al. (1992) argued that a causal link from the $\Sigma NB_j MC_j$ multiplicative term to attitudes should be an essential addition to the TRA model. In addition, Chang (1998) found that the direct effect of subjective norm on behavioral intention was not significant, but the indirect effect through attitude was highly significant. Thus, the direct causal path linking subjective norm components to attitude components was added to the original TRA model in this study.

There were several reasons why the TRA model was appropriate for this study. First, empirical research during the past thirty years has supported the overall predictive effectiveness of the TRA model in a variety of experimental and naturalistic settings (Sheppard et al., 1988). Second, Tourists' behavior of experiencing local cuisine in tourism destinations was viewed as a volitional behavior in this study in a sense that tourists could easily perform it if they decided to do. Based on the previous discussion, we suggested the following hypotheses concerning the relationships among latent variables:

- Hypothesis 1: $\Sigma BB_i E_i$ is a significant predictor of attitude ($\Sigma BB_i E_i$ -Aact).
- Hypothesis 2: $\Sigma NB_j MC_j$ is a significant predictor of subjective norm ($\Sigma NB_j MC_j$ -SN).
- Hypothesis 3: $\Sigma NB_j MC_j$ is a significant predictor of attitude ($\Sigma NB_j MC_j$ -Aact)
- Hypothesis 4: Attitude is a significant predictor of tourists' intention (Aact-BI).
- Hypothesis 5: Subjective norm is a significant predictor of behavioral intention (SN-BI).
- Hypothesis 6: Subjective norm is a significant predictor of attitude (SN-Aact).
- Hypothesis 7: Past behavior is a significant predictor of behavioral intention (PB-BI).

METHODOLOGY

Data

A questionnaire was designed to measure tourists' perception of their local cuisine experiences in a holiday

destination. A subsequent pilot test was conducted and the questionnaire was slightly modified in wording. The sample consisted of the students in a Midwestern University. The questionnaires were distributed and collected in classroom settings. Participants were asked to provide answers to questions about how they would perceive and behave if they are in the hypothetical situation. After deleting incomplete responses, 366 responses were finally utilized for data analysis.

Scenario Development

This study developed a scenario for tourists' local cuisine experience. It was believed that a scenario could provide respondents with a high degree of volitional control toward experiencing local cuisine while on vacation. A few considerations were taken to develop the scenario. First, New Orleans was selected as a travel destination because its image enhanced by special events such as Mardi Gras festivities and its unique regional cuisine is well known to domestic as well as international travelers. Second, the Fishbein and Ajzen (1975) model was originally designed to focus on the determinants and performance of a single behavior. In the questionnaire of this study, however, respondents were given two hypothetical choices: ordering familiar food or exploring the local cuisine that they never experienced before. In reality, travelers are constantly forced to make a choice among travel destinations, restaurants, foods, and so on. Some researchers suggested that behavioral prediction could be enhanced when alternatives were considered (Sheppard et al., 1988). The hypothetical scenario used in this study was as follows:

You and a close friend purchased a package tour to New Orleans over Mardi Gras weekend. It includes roundtrip airfare, hotel accommodations for 2 nights, and two \$20 dining certificates to one of the most famous local restaurants in New Orleans. You and your friend go to the restaurant for dinner in New Orleans. You and your friend are seated at your table. The waiter/waitress comes to take your order. He/she recommends that you experience New Orleans local cuisine. The wait staff recommends several famous authentic local dishes (e.g., Crab and Crawfish Stuffed Gulf Shrimp). The range of both local cuisine and familiar food costs between \$15 and \$25. You have the choice of eating local cuisine or familiar food.

Measures

Multiple-item scales were used to measure each component to test measurement error. For BB, subjects were asked to indicate on a 7-point scale (e.g., 1 = very unlikely, 7 = very likely) the likelihood that each of the six outcomes would occur if he/she experiences local cuisine. As an example, "Experiencing the local cuisine during this vacation in New Orleans means that I will experience a new meal I have never eaten before." The E corresponding to the salient beliefs was measured by asking respondents to evaluate the consequences of six belief items on a 7-point scale ranging from very good (7) to very bad (1): for instance, "Trying a new meal I have never eaten before is ____." NB was measured by asking subjects to indicate on a 7-point "very true-very false" scale the likelihood that each referent (parents, close relatives, close friends) thinks they should experience local cuisines while they travel. NB was assessed by three items such as "My parents think I should experience local cuisines in the next two weeks while I travel." To measure MC, subjects were asked to rank on a 7-point "very much-not at all" scale by indicating how much they want to comply what the referents think they should do. MC was measured using three items such as "Generally speaking, how much do you want to do what your parents think you should do?" Aact was operationalized using semantic differential scales (-3 = very worthless, 3 = very valuable) with four items in response to the statement "For me, experiencing local cuisine during this vacation in New Orleans will be ____." SN was measured by three 7-point "very unlikely-very likely" scale items: for example, "Most people who are important to me think I should experience local cuisine during this vacation in New Orleans." PB was operationalized with responses to the two items. For instance, "I never experience local cuisine when I am on vacation at my travel destination." A 7-point "not at all-very much" scale was used for each item. BI was assessed by asking respondents to react to the three statements. For example, "If I were in this situation, I intend to experience local cuisine." Participants responded to these items on a 7-point likely scale (e.g., 7 = very likely).

Data Analysis

The data were analyzed using the two-step procedure suggested by Anderson and Gerbing (1988). A confirmatory factor analysis (CFA) was first conducted to determine whether the observed variables that were indicators of certain latent variables reliably reflected the hypothesized latent variables using covariance matrix. A CFA model was run that fixed all factor variances at unity to identify the model and all constructs were allowed to inter-correlate freely without attribution of a causal order. Secondly, a structural equation modeling (SEM) with latent variables via LISREL 8.54 was tested to determine the validity of the modified version of the TRA for the latent variables of the model and testing the hypotheses. $_{BB_iE_i}$, $_{NB_jMC_j}$, and PB were exogenous variables and Aact, SN, and BI were endogenous variables in the analysis.

RESULTS AND DISCUSSIONS

Measurement model

Based on the results of the first CFA, some items ($_{BB_2E_2}$, $Aact_3$, and BI_2) were deleted due to low loadings. Then, a CFA was conducted again. All factor loadings emerged fairly high ranging from 0.75 to 0.96, which met the minimum

criterion of .40 (Ford et al., 1986). Cronbach's alphas were also satisfactory for all seven constructs (0.84-0.93), indicating acceptable internal consistency. The composite reliabilities of constructs ranged from 0.85 to 0.96, indicating adequate internal consistency (Bagozzi & Yi, 1988). The AVE of all six factors ranging from 0.65 to 0.88 met the minimum criterion of 0.5, satisfying convergent validity. The AVE in each construct exceeded the square of the estimated correlation between the factors, indicating discriminant validity was also met (Fornell & Larcker, 1981). Several widely used goodness-of-fit statistics were used to evaluate the fit of the model. These fit indices consistently indicated the confirmatory factor model was a good fit for the data ($\chi^2 / \text{d.f.} = 2.62$; RMSEA = 0.066; NFI = 0.98; TLI = 0.98; CFI = 0.99; GFI = 0.91).

Structural Model

A structural analysis was performed to validate the modified TRA in predicting BI using two criteria: fit indices and path significance. Using maximum likelihood estimation, goodness-of-fit statistics supported that the structural model generated a good fit to the data ($\chi^2 / \text{d.f.} = 2.65$; RMSEA = 0.07; NFI = 0.97; TLI = 0.98; CFI = 0.98; GFI = 0.90). The proportion of explained variance for BI by Aact, SN, and PB was 0.86, indicating the TRA model could well predict and explain tourists' intention to experience local cuisine as described in the scenario of this research. The results revealed a pattern of causal relationships that was theoretically consistent as shown in Figure 1. The estimate of the standardized path coefficient indicated that the linkage between BB_iE_i and Aact was significant ($\beta = 0.71$) and the linkage between NB_jMC_j and SN was also significant ($\beta = 0.73$). Therefore, Hypotheses 1 and 2 were supported. However, Hypothesis 3 (NB_jMC_j to Aact) and Hypothesis 6 (SN to Aact) were not supported. This finding was consistent with the independence of attitudinal and normative components in the original TRA model as opposed to a few previous studies (Chang, 1998; Ryan, 1982). The parameter estimate for the path linking from PB to BI was significant ($\beta = 0.25$), which supported Hypothesis 7. That is, the BI of experiencing local cuisine became stronger as the number of the prior experience increased.

Figure 2
Causal Relationships Between Latent Variables

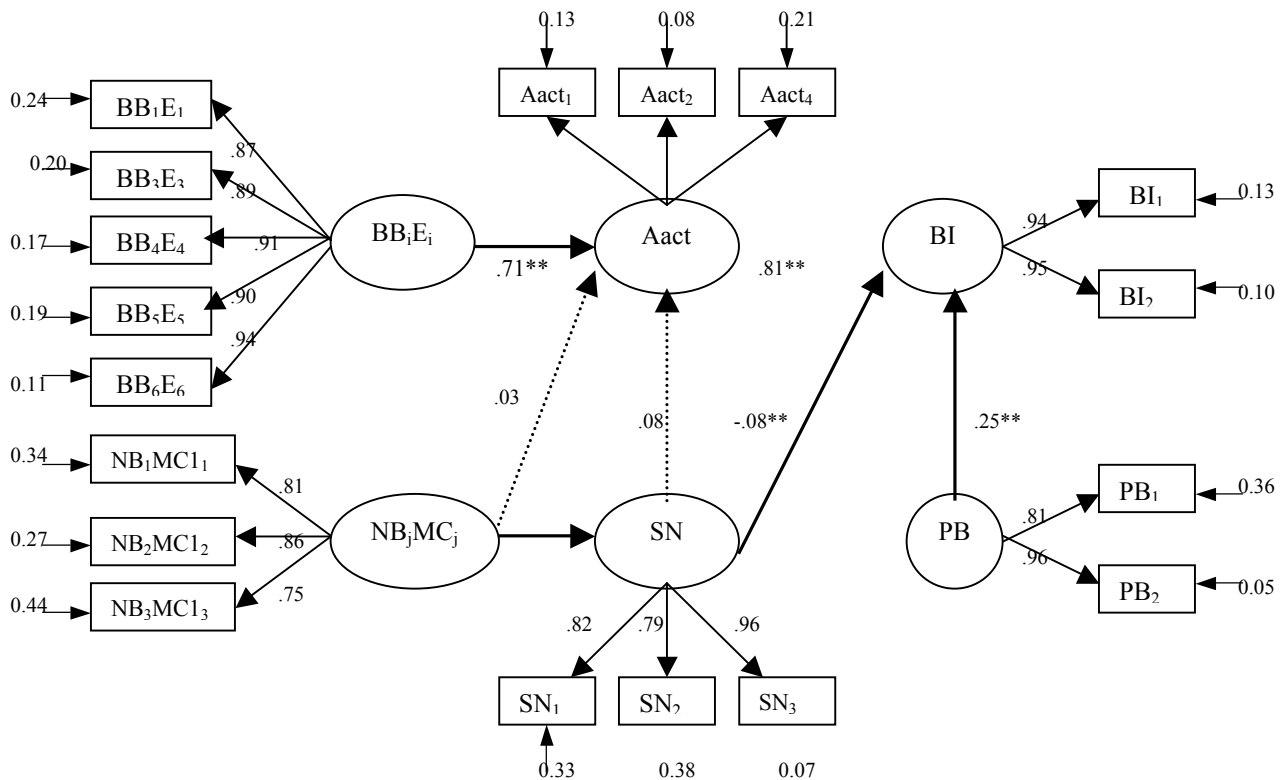


Figure 1 shows that Aact was a significant predictor of tourists' BI to experience local cuisine on vacation, supporting Hypothesis 4 ($\beta = 0.80$). Hypothesis 5 was also supported because the path from SN to BI was statistically

significant ($\beta = -0.08$). Unlike expectation, however, the sign of the causal path was negative. That is, the respondents were less likely to follow what the person's important others may suggest. This unexpected result might occur probably because of the nature of the sample frame (90% of students below 25 in this study) used in this study. In general, traditional university students in their early twenties may be willing to do what they want to do with less caring about others' perceptions on their behavior or even be willing to act against those. Indeed, Aact contributed much more than SN in predicting BI in this study. The reason might be that attitudes focused directly on the consequences of action while SN dealt with a more remote element, namely perceptions of what significant others than one should do (Vallerand, 1992). Since Aact was proved to be a primary contributor of BI, the marketing strategy should be directed toward generating positive beliefs (e.g., developing interesting food) about the positive consequences of tourists' experiencing local cuisine.

CONCLUSION

In sum, results revealed that the modified TRA model could well predict the tourists' intention toward local cuisine ($R^2 = .86$), indicating its applicability in the hospitality and tourism industries. The findings of this study supported the overall structure of the modified TRA model. The independence between attitudinal and normative structures was also found. Although SN was a significant antecedent of BI, Aact was the dominant significant predictor of BI. Moreover, the hypotheses of structural parameters of $_{BB_iE_i}$ to Aact, and $_{NB_iMC_i}$ to SN were supported. Since tourists' intentions associated with the experience of local cuisine were primarily dependent on their own personal attitudinal factors than social norms, restaurateurs should make their marketing efforts toward attitudinal factors. That is, to increase tourists' intention to sample traditional foods in a destination, it may be effective for restaurateurs to generate positive beliefs through advertising campaigns to promote adventurous and interesting authentic food. A positive causal relationship from past behavior to behavioral intention indicated that past experience could make tourists' intention toward local cuisine significantly stronger. This might imply that local cuisine could serve as attractions for tourists who have experienced local cuisine in a tourism destination. It is important for restaurateurs to target potential tourists who are likely to experience local cuisine again. Marketers also need to pay attention to spreading positive word-of-mouth about experiencing local cuisine to generate positive beliefs in a tourism destination. Thus, it is essential to enhance tourists' satisfaction while they experience local cuisine. Restaurateurs should understand tourists' personal expectations and provide satisfactory service to them by developing new foods with exotic flavors and authentic ingredients.

The use of a homogeneous student sample, while it may be desirable for reducing extraneous variance, and convenience sampling method limited the generalizability of the study findings. While the TRA model has been applied to samples in the western cultural settings, little efforts have been made for oriental cultures. Understanding the consumer behavior with respect to the diverse cultures has been increasingly important especially in the hospitality and tourism industries because of the globalization of business. Therefore, future study is hoped to investigate cross-cultural validation of the modified TRA model.

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THE INTERNET'S ONLINE BOOKING REVOLUTION AND THE DETERIORATING EFFECTIVENESS OF HOTEL REVENUE MANAGEMENT POLICIES: THEORETICAL AND PRACTICAL IMPLICATIONS

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ABSTRACT

The effectiveness of revenue management systems has diminished in recent years due to the systems' inability to address the increasing complication of online deal-seeking behavior. To restore their efficiency, one must first understand the changes in advanced-booking behavior and their implications. This study expands the consumer booking model by addressing the impact of time-before-the-date-of-stay and exploring the implication for the hotel's pricing/marketing strategies. The findings underscore the urgent need for empirical research on timing by showing that the predictions of the advanced-booking model, and consequently the effectiveness of RM systems, depend on the actual patterns over time.

Key Words: Advanced Booking, Hotel Revenue Management Internet

INTRODUCTION

Hotels and related travel services face a growing challenge as savvy consumers adapt to Revenue Management (RM) systems. The nature, intensity, and frequency of travelers' booking activities during the pre-travel period and, more specifically, during the time between need-recognition and service consumption, has radically changed in recent years mainly because of the Internet. Online booking emerged not only as a convenient way to search and book travel services (Kierzkowski et al. 1996, Suskind Bonn and Dev, 2003, Weber and Roehl, 1999) but also as a major venue for business and leisure travelers to seek bargains and better deals (Tofa, 1998). Last-minute deals are now considerably easier to find because they are offered by travel and company websites (Shapiro 2003), making the pricing structure of hotel properties "nearly transparent to the customer" (Carroll and Siguaw 2003). Hotel and travel companies not only acknowledge the change but also promote it to some extent through their marketing policies. Dela Cruz (2002) reports that hotel executives in Carlson, Cendant, and Choice believe that the economic downturn made customers price sensitive particularly when booking on the Internet. Others express a similar sentiment. For example, the CKC report (1996) states that Radisson Hospitality Worldwide is offering its lowest room rates to travelers on its Internet site, and Olearchick (2003) argues that the reason behind the Internet booking explosion is price. He quotes Richard Broome, Hertz's vice president of corporate communication who stated, "The best priced are usually found on the Web." A recent study conducted by the American Express Global Interactive Travel Group found that the average price of a ticket bought online was substantially lower than a fare booked through a travel agency (Fox, 2004). Francois Gautier, the Group's Vice President and General Manager for Europe, argues that the Internet is not only an outlet for deal-seeking customers but it also promotes deal-seeking behavior: "When you book it yourself ...psychologically, you are in charge, and you will look for one of the cheapest fares. We call it the visual guilt phenomenon."

While aware of this phenomenal change and, in many instances, actively promoting it, the industry has only started to explore the impact that these changes have on the performance of hospitality and tourism RM systems. Shaw (2002) states that the use of third-party online booking sites has made "managing hotel rates and inventory [i.e., yield management] more complex than ever." This paper, however, argues that the challenge is considerably more serious as it is rather the change in consumer behavior that poses a substantive, long-term threat to the RM mechanisms' ability to generate the necessary revenue stream. A typical case was reported at the 2003 Professional Convention Management Association convention in Anaheim, California. According to Bair (2003) "there is an epidemic of booking outside the negotiated room block, as hotels, struggling to fill their rooms in a down economy, dump inventory on discount Internet booking sites and attendees look for bargains." This example is indicative of an industry-wide challenge, one that is expected to intensify as the evolving changes in market conditions continue to impair the efficiency of a wide range of existing revenue optimization mechanisms. It is the author's opinion that the predicament is caused mainly by the oversimplified nature of the many revenue management policies that assume an unsophisticated, static consumer. Designed and tested before the Internet era, they ignore the evolving sophistication and complexity of the consumer's pre-travel decision process. Due to the Internet revolution, this consumer decision process increasingly involves adaptive search patterns, learning elements, and expectations updating.

The goal of this study is twofold. It seeks to advance consumer behavior theory to better reflect the changes brought about by the Internet revolution and it seeks to call attention to the need for extensive empirical research about the impact of timing.

THE FUNDAMENTALS OF THE ADVANCED-BOOKING STRATEGIC ZONES MODEL

This section discusses the strategic zones of the advanced-booking decision model as suggested in Schwartz (2000) and expanded in Schwartz (2004a) to include consumers' utilities and strategic switch points. This fundamental model, which does not address time, is expanded in the next section to include the impact of time-before-the-date-of-stay (TBTDS). Note that due to space limitation, this section is only a summary of previous modeling efforts and the interested reader is advised to examine the detailed description of the fundamental model, including the decision trees, in Schwartz (2000 & 2004a).

As outlined in the previous section, anecdotal and empirical evidence suggest that with the proliferation of Internet use for pre-travel arrangements, a growing number of customers have become more sophisticated -- they search for good deals and employ various strategies to reduce costs and to maximize their expected utility. This behavior of advanced-booking customers differs from what is described by traditional marketing models of the purchase cycle. The decision options available for advanced-booking customers are rather unique and are certainly different from the options of customers who purchase traditional goods or services. A typical, five-step marketing purchase cycle is described by, for example, Lamb, Hair and McDaniel (2004), Morrison (2002), and Solomon (1996). A travel and tourism version of this traditional purchase cycle is described in Mathieson and Wall (1982) and Wahab, Crompton, and Roghfield (1976). It starts with *need recognition*, continues with *information search*, *evaluation*, *purchase decision*, and ends with *post-purchase evaluation*. At the core of the model suggested by Schwartz (2000 & 2004a) is the notion that advanced-booking hotel customers have multiple options rather than the (yes/no) binary *purchase decision* found in the traditional five-step purchase cycle of goods and services. This is because the reservation of a hotel room is not equivalent to the purchase action in the purchase cycle. At best, it is a semi-commitment made by the customer to purchase a room, as the decision can be reversed or changed anytime before the actual date of stay. It means that during the pre-travel period, and with the added convenience and wealth of information provided by online booking, consumers can actually go backwards in the process; that is, return, for example, to *search* after the semi *purchase decision* (reservation) was made and even executed.

It was argued that any time during this period, the advanced-booking customer can choose from a set of 4 generic strategic options: *Book*, *Book and Search*, *Search* or *Other*. The term *Book* is used to describe the customer reserving a room and doing nothing else about the room until check in. The term *Book and Search* refers to a traveler's decision to reserve a room but to also continue looking for a better deal, often with the same hotel as discounted rooms might be offered nearer the date of stay. With the *Search* strategy, the consumer does not reserve the preferred brand but rather keeps looking for a deal. The last strategy of *Other* means that the consumer reserves a room in another hotel. That is, the second best brand on the consideration list moves up to become the first. The customer's utility from each strategy j is U_j ($j=1$ being *Book*, $j=2$ being *Book and Search*, $j=3$ being *Search* and $j=4$ being *Other*). At each point of time during this period, while assessing the value of each of the 4 generic strategies, the consumer evaluates the likelihood and magnitude of future events such as hotel sell-outs or changes in room rate (e.g., offers a discount). In addition the consumer evaluates elements such as the cost of a continued search for a better deal, and the cost of canceling a reservation. Formally the decision variables are as follows: R_a denotes reserve price for brand a , that is, the highest rate the customer is willing to pay for a room at the preferred hotel. Similarly, R_b denotes the reserve price for brand b , that is, the highest rate the customer is willing to pay for a room at the second best hotel. P_a denotes the room rate quoted by the preferred brand, a , and P_b denotes the room rate quoted by the second best brand, hotel b . The variable S is the search cost per period. This is the monetary equivalent of the cost the consumer associates with the activities and resources needed to look for a better deal (e.g., time). D denotes the size of the discount the consumer expects the hotel will offer in the future. n denotes the expected number of search periods until the discount is offered. Obviously, the total expected search cost is the product of the search cost per period (S) and the number of search periods (n). P_v denotes the probability that the destination will sell out during the search period. In fact, this is the customer's subjective assessment of the likelihood of the future event. P_d denotes (assessed) probability that a discounted rate ($P_a - D$) will be offered after n periods of search. F denotes the penalty for canceling a guaranteed reservation. It is given as a percentage of P_a , the room rate quoted by hotel a .

In line with conventional marketing modeling, the consumer's utility, U_j , is defined as the difference between the consumer's willingness to pay for the room (reserve price) and the expected cost of strategy j . The consumer selects strategy j so that the utility, U_j , is maximized. Thus, the consumer assigns an expected value to each of the four generic strategies ($j=1,2,3,4$) as follows: $U_1 = R_a - P_a$, $U_2 = R_a - \{S_n + [I + P_d(I - P_v)(F - D)] - P_a\}$, $U_3 = R_a - P_v(P_b + R_a - R_b) - S_n(-1 + D - P_d)(-1 + P_v)P_a$ and $U_4 = R_b - P_b$. As noted above, the consumer chooses the strategy such that the utility is maximized. Formally, the decision rule of selecting a strategy that has the highest utility is given by $\text{Max}\{R_a - P_a, R_a - (S_n + I + D P_d(-1 + P_v) + F(P_d - P_d P_v) - P_a), R_a - P_v(P_b + R_a - R_b) - S_n(-1 + D - P_d)(-1 + P_v)P_a, R_b - P_b\}$. Consumers switch from one strategy to another when the utility associated with the first strategy is no longer the highest. According to this time-independent model (Schwartz, 2004a) the strategic switch points (the points where the lines that

represent the utility of two strategies intersect) are defined by pairs of rates and utilities. The first strategic zone (the *Book* decision which is, from the provider's perspective, the preferred response) is associated with room rates that are lower than P^* , where $P^* = -\frac{Sn}{(D-F)P_d(P_v-1)}$. In other words, strategy 1 is dominant (with the highest expected utility) when the room

rates are lower than the threshold of P^* . The second strategic zone of the *Book and Search* strategy is associated with room rates that are higher than P^* and lower than P^{**} , where $P^{**} = -\frac{P_v(P_b+R_a-R_b)}{F \cdot P_d(P_v-1)-P_v}$. The third strategic zone of *Search* is

associated with room rates that are higher than P^{**} and lower than P^{***} , where $P^{***} = -\frac{(-1+P_v)(P_b+R_a-R_b)+S \cdot n}{(-1+D \cdot P_d)(P_v-1)}$ and the

fourth zone of *Other* is associated with room rates that are higher than P^{***} .

Time before the date of stay and the model's variables

The major motivation to consider the role of TBTDS is the notion that customer expectations and subjective assessment of future events (such as the likelihood of a hotel to sell out) cannot be assumed to be stationary. This is simply because the consumer's assessment of the factors' magnitude depends, in part, on the number of days left before the check-in date. The little available empirical and anecdotal evidence indicate that some variables might indeed change as time nears the date of stay. Theoretically, the value of each non-stationary factor can increase, decrease, or follow a pattern that combines increases and decreases. Moreover, the change (increase and/or decrease) can be linear or non-linear, e.g., concave or convex. Due to space limitation, this study demonstrates the theoretical impact of TBTDS using only a subset of variables. Naturally, if the claim is supported with some variables, then it establishes the need for empirical research that identifies the variables that change over time along with the change patterns.

The number of search periods, n.

At present, there is practically no research on the manner in which hotel guests' search behavior changes over time. The little known about the pattern of search frequencies is only remotely related to the question on hand. For example, Bhatnagar and Ghose (2004) showed that Internet users' search patterns and duration depends on the type of information they seek, but the time element, and specifically as it relates to perishable items, was not investigated. It can be argued that as time progresses (i.e., as the date of stay nears), the number of possible future searches diminishes. Since there is less time left before the date of stay, there are fewer opportunities for the consumer to search for a deal. There is, however, no clear a priori indication of the speed and shape of this hypothesized decrease (i.e., is it linear and how fast does it decline?). If one assumes that the frequency of search activities is equally distributed over time, then the decrease in the number of search periods as time progress is linear. Nevertheless, other assumptions about the distribution of search frequency result in different patterns of decrease.

Probability of a sellout (P_v).

Empirical evidence (Schwartz 2000) suggests that as the date of stay nears, there is an increase in the customer's willingness to book the same room for the same rate. This increase was attributed to the customer's assessment that as the date of stay nears, the likelihood of the hotel selling out increases. Unfortunately, willingness to pay was measured only twice during the search period. Consequently, it is not possible to determine whether this increase over time is linear or nonlinear.

Probability of a price change (P_d).

As with n , there is no empirical research on the way in which the consumer assesses the likelihood of a future price change (e.g., a discount) as the date of stay nears. Information theory suggests that in this asymmetric situation where the tourist has considerably less information than the provider (about the provider's intention of changing rates), external cues might play a role in shaping the consumer's perceptions and expectations (Schwartz 2004b). In the absence of other relevant information, the notion is that less time before the date of stay might create the expectation of a rate change for the consumer but there is no a priori reason to assume an increase, decrease, a linear or nonlinear change. We add t (TBTDS) to the utility equations outlined in the previous section as follows: $U_1 = R_a - P_a$, $U_2 = R_a - \{S_{-n(t)} + [I + P_{d(t)}(I - P_{v(t)})(F - D)]_{-P_a}\}$

$$U_3 = R_a - P_{v(t)}(P_b + R_a - R_b) - S_{-n(t)}(-1 + D \cdot P_{d(t)})(-1 + P_{v(t)})P_a \text{ and } U_4 = R_b - P_b.$$

Consequently, the modified switch rates are given by $P^* = -\frac{Sn(t)}{(D-F)P_{d(t)}(P_{v(t)}-1)}$, $P^{**} = -\frac{P_{v(t)}(P_b+R_a-R_b)}{F \cdot P_{d(t)}(P_{v(t)}-1)-P_{v(t)}}$,

$$P^{***} = -\frac{(-1+P_{v(t)})(P_b+R_a-R_b)+S \cdot n(t)}{(-1+D \cdot P_{d(t)})(P_{v(t)}-1)}.$$

When the TBTDS dimension is added to rate/utility plane these three switch equations no longer denote a point but rather a line in a 3 dimensional space of rate/utility/TBTDS.

Due to space limitation, the values of each parameter and the assumption of their behavior over time are not discussed in this shortened conference version of the paper. An entire section devoted to this issue can be found in the full version of the paper. Note that the utility planes are no longer constant over time and therefore the switch lines are not necessarily straight. Most importantly, the analysis illustrates the time dependency of the booking decision: It changes over time even if the rate does not change! Given a set of parameter values, the shape of a two-dimensional graph created by slicing this chart at a specific point (i.e., a value on the TBTDS axis) depends on the point selected and would most likely deviate from that of the time independent model.

CONCEPTUAL IMPLICATIONS FOR HOTEL PRICING-MARKETING STRATEGIES

The hotel's objective within this framework is to optimize the consumer's booking decision. That is, through marketing and pricing actions, the hotel wishes to affect the booking decision of prospective guests so that for any given quoted room rate the likelihood of a more favorable booking decision is increased.

A list of hotel pricing/marketing actions and their likely impact on the consumer decision in a time-independent model was discussed in Schwartz (2004a). It includes actions such as changing the cancellation penalty policy (i.e., the price of canceling a reservation) and manipulating the consumer's perception of the likelihood of a sellout in addition to that of a future price change (a better deal). Three major conceptual implications in regard to this list should be considered based on this paper's assertion about the role of TBTDS:

1. Direct impact: The effectiveness of the marketing/pricing actions depends on timing (TBTDS). Simply stated, a quoted rate that induces optimal booking decisions, let's say, three months before the date of stay, might turn out to be sub-optimal (in terms of the booking decision of the same consumers) two weeks before the date of stay.
2. Indirect Impact: The effect of TBTDS on the consumer decision (mainly through expectations that are formed and modified over time) might be amplified through targeted pricing strategies to produce better results. For example, controlled release of information on predicted occupancies and/or signaling (by changing quoted rates) might prove more effective in promoting desirable booking decisions when administrated at the "right" time. This has to do with the notion that consumer assessment of the likelihood of future events is biased (in the sense that it depends on the timing). It follows that the same consumers might also be more "vulnerable" to targeted marketing efforts because they interpret information and signals in a "biased" manner as well.
3. The pattern of changes in the booking decision over time depends on the model parameters and on the way consumer perceptions and expectations change over time. Scenarios *B* and *C* are only two out of numerous possible results. A variety of very different utility planes and booking decision planes can be obtained by simply changing the parameter values and, more importantly, by modifying the assumptions about the behavior of the parameters over time. Perhaps the most important insight gained by the theoretical modeling is that without precise values (of the parameters) and a concrete understanding of the way these parameters change over time, one cannot design valid pricing mechanisms because their output would be unpredictable!

THE NEED FOR EMPIRICAL RESEARCH

The previous sections demonstrate the complexity of the response pattern as well as the dependency of the booking decision on the assumptions made about the variables and how they change as the date of stay nears. Tempting as it may be, this precludes one from identifying specific pricing/marketing actions because their effectiveness depends on the shape of the response function as defined by the variables and their "behavior" over time. Hence, to be able to identify optimal pricing strategies and optimal timing, and consequently to restore the effectiveness of revenue management policies, one must first uncover the model's dynamics over time. Two major categories for empirical investigation emerge – both are concerned with the consumer advanced-booking decision model variables, addressing the need for a firm understanding of the consumer's behavior over time.

SUMMARY AND CONCLUSION

The online booking revolution, brought about by the proliferation of Internet use for pre-travel arrangements, diminishes the effectiveness of traditional revenue management systems. Existing revenue management policies fail to properly address the remarkable change in consumer behavior. Online booking emerged not only as a convenient tool for advanced booking, but also as a superb tool for searching and finding better deals. According to industry insiders and outside observers, the Internet supports and promotes deal-seeking behavior. Hence, a growing portion of the market is

composed of sophisticated consumers who attempt to outsmart the revenue management policies while showing advanced-booking behavior characteristics that are yet to be fully understood. In an attempt to enhance our understanding of the evolving processes, this study expands the advanced-booking decision model to include the impact of time before the date of stay. It was argued that if the somewhat unrealistic assumption about the parameters being static is removed, then the model predictions about the consumers' generic booking strategies are likely to be modified considerably and better reflect reality. Demonstrating that the shape and pattern of the parameters' change over time determines the model predictions about the booking decision, it is concluded that empirical studies that investigate the true nature of the parameters' change over time are a must.

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MASS CUSTOMIZATION IN THE TRAVEL TRADE: A REALITY CHECK IN THE GREEK TRAVEL AGENT AND TOUR OPERATOR SECTOR

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ABSTRACT

The provision of customized services/products at competitive prices is amongst the highest business priorities. Increased travelers' sophistication and flexibility as well as technological advances are also challenging the mass customization (MC) ability of travel agents and tour operators that are increasingly adopting dynamic packaging practices. MC is well researched in manufacturing, but MC studies in the services and tourism literature are limited. This paper examines MC in the travel trade and reports on an exploratory study investigating the MC applicability-urgency, implementation factors and readiness of Greek travel agents and tour operators. Findings provide useful practical and academic implications.

Key Words: mass customization, travel agents and operators, capabilities

INTRODUCTION

During the 19th century the industrial revolution took hold and mass production was the common manufacturing term used, where products were produced in large quantities at low and affordable prices. The success of mass production was undeniable as products were manufactured on massive levels, in direct response to consumer demands. In the 20th century, however, consumers became more sophisticated, and aware of issues pertaining to the design, quality and functionality of their products and services (Gilmore & Pine, 1997). The tourism industry is not an exception of such developments. Currently, the increased online price, product and tourism supplier transparency as well as the business models of Internet companies allowing customers to participate in product development, design, production and delivery process (e.g. Dell, Travelocity.com dynamic package possibilities), have increased demand for affordable and reliable products/services that correspond exactly to the specific individual needs. Moreover, as disposable income, time and flexibility of travellers' increased, demand for pre-packaged, static tours is decreasing, while more customers are willing to spend a little more on personalised tourism services, package their own tours by assembling and selecting their own tour components and/or create their own flexible itineraries (Sigala, 2005; Christou & Kassianidis, 2003). Traditionally, to address these trends many travel trade companies followed a niche marketing strategy aiming to differentiate travel products-services by processing travellers individually and charging them premium prices (e.g. specialised travel agents). However, current competition prevents companies from reacting and charging for product customisation, while technological advances have enabled and fostered flexible operating procedures that reduce the cost of product customisation at mass production output levels, i.e. mass customisation (MC).

In the travel trade sector, MC is mainly reflected on the increased adoption and development of dynamic packing practices by several travel agents and tour operators (Anite, 2002). However, research into MC within the service and tourism sector is limited (Frutos & Borestein, 2004). As travellers are becoming more sophisticated, flexible and demanding, MC is also becoming a business imperative that grants further exploration. In this vein, this paper aims to examine the drivers and urgency of MC as well as to investigate the concept, applicability and factors of MC implementation in the travel agents and operators sector. To achieve that, after reviewing and adapting the relevant literature into the travel trade sector, the paper reports on the MC readiness of Greek firms by conducting an exploratory study. Findings provide useful practical and academic information and implications.

THE CONCEPT AND DRIVERS OF MASS CUSTOMIZATION

The term *mass customization* was coined by Stan Davis (1987) who predicted that the more a company was able to deliver customized goods on a mass basis, relative to their competition, the greater would be their competitive advantage, a view supported by Pitt, Bertham & Watson (1999), and Duray & Milligan (1999). Pine, Victor & Boynton (1993) describe the synergy of MC as a 'new' and competitive strategy to challenge 'old' strategies such as mass production. Hart & Taylor

(1996) offer an operational definition: 'MC is the use of flexible processes and organizational structures to produce varied and often individually customised products/services at the price of standardised, mass produced alternatives'. MC of markets means that organisations can reach the same large number of customers as in the mass markets, but additionally they have the ability to address their customers individually as in the customised markets (Parker, 1996). Flexibility, variety and responsiveness of processes and resources reconfiguration are all essential to the notion of MC, while companies need to understand what customers really want and then respond quickly with an offering which costs the customer relatively little more than standardised, mass produced alternatives (Duray & Milligan, 1999; Pine et al., 1993).

To develop MC operational capabilities and define the boundaries of the MC concept, Duray et al. (2000) identified two critical MC dimensions: a) the basic nature of customization; b) the means for achieving customization at or near mass production cost. The first dimension concerns customer's involvement in the value chain process (e.g. design, production, assembly, delivery, usage) and is used for determining the customization degree. The second dimension is related to modularity. Modularity is used as the critical aspect for gaining scale volume or 'mass' in MC, as a modular approach: can reduce the variety of components while offering a greater range of end products; allows part of the product to be made in volume as standard modules; and creates product distinctiveness through combination or modification of the modules. Overall, modularity provides both economies of scale and economies of scope, as component modularity restricts the range of choice, decreasing the possible variety of components and thus allowing for repetitive manufacturing.

It is quite easy to understand the modularization of the travel trade product, as travel agents and tour operators traditionally considered their products as consisting of different components, e.g. accommodation, flights and other transportation alternatives, leisure activities (e.g. museum and theatre tickets etc). These components are either pre-packaged by travel trade firms and then offered to customers at low prices as static tour packages or alternatively travel trade firms allow customers to select their own components for creating their own flexible tour package and itinerary for a premium price. However, nowadays, technological developments and mainly new business models adopted by online intermediaries offer tremendous opportunities to revolutionize both MC dimensions. On the one hand, technological advances enabled travel trade firms to create large inventories of travel product components that dynamically change in terms of their availabilities and prices by seamlessly integrating their online booking mechanisms with the suppliers' reservation systems. Such integration allows online travellers to check product and price availability on real time as well as create and book their own personalised itineraries/packages (e.g. Travelocity.com, expedia.com). Thus, technology has fostered the development of flexible, large and dynamically changing databases of tourism components/products as well as enabled travellers to participate in the design of tour packages. Recently, current examples reveal more innovative travel trade MC practices. For instance, virtual communities of travellers enable experienced travellers to provide online advice to other travellers that want to create and book online their own travel package (e.g. lonelyplanet.com, lastminute.com). Other online intermediaries are using collaborative filtering, 'cookies' and other internet technologies for developing customer databases, gathering and mining customer profiles that in turn are used for offering and suggesting customised tour packages and/or product components to other customers.

Based on the customisation level, Anite (2002) identified three types of tour package operations and products:

- ♣ *Static packaging*: various components are assembled into fixed, pre-determined itineraries (and typically priced) in advance of the point of sale and sold as a single product and price.
- ♣ *FIT (flexible itinerary)* is a truly shopping cart. Each item is individually priced and purchased and one component selection does not affect other selections or the behavior of the inventory management system in terms of options, pricing or guidance, i.e. the price of the whole package is equal to the sum of its components.
- ♣ *Dynamic packaging*: there is no need to assemble packages in advance. Different components can be selected, bundled and priced in real time at the point of sale in response to the requests of the customer or the booking agent. The packaging process is defined by packaging rules set by the operator, and each consumer's selection shapes the response of the packaging system, the behavior of the components, the final price and the component set of the package.

The adoption of dynamic packaging and MC practices is transforming the tour packaging operations from inventory-driven to value driven operations which entail a change in operational aims, evaluation metrics, culture and strategy:

- ♣ Inventory-driven operations and packaging aim to maximize the utilization of purchased/committed (risk) inventory; small differences in the percentage of utilized inventory can result in major swings in profitability: e.g. escorted tours and group travel packages, charter-based packages, event and attraction packages
- ♣ Value-driven operations and packaging aim to offer a special price and/or to increase the average value (revenue) per transaction, e.g. FIT, dynamic packaging.

The justification for the development of MC systems is based on three main ideas (e.g. Pitt et al., 1999; Duray & Milligan, 1999; Pine et al., 1995). First, new flexible manufacturing and information technologies enable production systems to deliver higher variety at lower cost. Second, there is an increasing demand for product variety and one-to-one customization. Finally, the shortening of product life cycles and expanding industrial competition has led to the breakdown of many mass industries, increasing the need for production strategies focused on individual customers. Pine (1993) also introduced a useful tool for identifying MC drivers named as the market turbulence map, consisting of the following factors. With quickly changing needs, which in turn lead to shorter product (or services) life cycles, mass production processes can become strained. If the market is heterogeneous, the economies of scale of mass production may also diminish. The rate of technological change, the service level required, the 'quality consciousness' of customers, and the competitive activity in the environment are also considered by the market turbulence map. Quality is no longer 'meeting product specifications designed by the producer', but increasingly 'meeting whatever the customer wants'. High competitive intensity can result in uncertain product demand, the need to differentiate offerings, and the search for niches to fill.

When considering the competitive situation and trends within the tourism industry, it can be argued that the following trends have driven to the urgency and need of MC practices (Anite, 2003): a) the reduction of commission to travel trade firms by tourism suppliers; b) the need of travel trade firms to find new revenue making models by providing enhanced customer value and new customer services; c) the possibility of dynamic packaging to provide new revenue streams to travel trade firms and customer loyalty; d) the rise of no-frills airlines that have increased the number and willingness of travellers to travel independently and to create their own itinerary and tour package; and e) the increased competition rising from cyberintermediaries (new travel trade firms) as well as other tourism suppliers (e.g. airlines) offering online flexible travel package creating solutions (new competitors' entrance is mainly due to decreasing technology costs).

Mass customization in the travel agent and tour operator sector: implementation factors and levels/types

The key word in MC is flexibility, both in processes and organisational structures (Pine et al., 1995). This distinguishes mass customization from mass production. Such flexibility demands new skills in organisational learning, business processes, and procedures. Haeckel & Nolan (1993) prescribe a three part model dealing with the problems of unpredictability and customer variation. In this 'sense and respond' model they suggest that information, capabilities, and leadership are the key elements. Information on the marketplace needs to be sensed and acted upon, and for this they suggest 'managing by wire' (an analogy taken from the air pilot's use of technology to codify information and events in such a way as facilitates appropriate and rapid response). They state that the degree to which a "firm can 'manage-by-wire' will depend on the size and complexity of the business. This is also known as the 'corporate IQ', which is the ability of the institution to access, share, and extract meaning from all the signals and information in the environment. To truly manage-by-wire, the IT infrastructure must be designed according to an enterprise model, 'a high-level map of a business that guides the writing of a computer code and the execution of nonautomated activities' (Haeckel & Nolan, 1993).

However, they caution that for the enterprise model to be complete, it must incorporate 'the notions of commitment and human accountability in business processes' and must also 'deal with unstructured work and ad hoc processes' (Haeckel & Nolan, 1993). Leadership in this context needs to follow a distinct governance mechanism that not only stresses principles but also true accountability. Governance, as opposed to management, is the word selected because the old 'command and control' management style needs now to give way to *employee empowerment* and *process management* (context and co-ordination), which needs to be governed instead of managed or dictated (Haeckel, 1995). In the hospitality sector, Mok et al (2004) highlighted and illustrated how employee empowerment and an open hotel culture are the most important factors for developing customer relations and then creating personalised hotel experiences. Ultimately, the human factor is also vital of the success of MC, especially in the services context, for it represents the skills and knowledge required for the implementation of MC (Peters & Saidin, 2000). The management and employees should be not only aware of what MC is and what it can achieve, but they also need to have the skills for its implementation. Overall, when implementing MC, firms should consider the following factors (Pine, Peppers & Rogers, 1995; Da Silveira et al., 2001):

- ♣ Create a modular production system.
- ♣ Allow their employees access to all necessary information thus improving the flexibility of processes and their adaptability to customers' needs.
- ♣ Evaluate the products in customers' terms, i.e. how well a product serves a customer.
- ♣ Offer appropriate number of choices and select a product range best satisfying the customer.
- ♣ Establish a direct link with customers, create a customer interface that is value added to customers, and make it harder for customers to go elsewhere

- ♣ Develop a responsive and flexible value chain/network: MC is a value chain based concept. Its success depends on the willingness and readiness of suppliers, distributors and retailers to attend to the system's demand and develop a demand-pull rather than a supply-push supply chain. The supply chain players must be part of an efficient linked information and physical network for providing the company with real time information and products.
- ♣ Knowledge must be shared. MC is a dynamic strategy and depends on the ability to translate new customer demands into new products and services. To achieve that, companies must pursue a culture that emphasizes knowledge creation and distribution across the value chain. Moreover, it is the efficiency in information transfer from customers to companies that really determines to a great extent the success of a MC program (Frutos & Borenstein, 2004).
- ♣ Develop a flexible information technology application infrastructure. Information technology and the Internet are critical success factors for MC (Peters & Saidin, 2000), for they provide the means of communication and collaboration with the customers and the development of flexible business processes. It is argued (Jiang, 2000; Peters & Saidin, 2000) that modern technologies enable business to analyse individual customer needs and tailor their products and services to these needs. For example the Internet technologies facilitate the collection and employment of numerous data/information concerning the individual customer. Businesses have the opportunity now, more than ever to accumulate, distribute and store all kinds of information on our existing and potential customers and co-ordinate their processes in the e-business era. Papathanassiou (2004) identified the following information and technology features that firms should develop: flexibility, reliability, responsiveness, reusability and cost.

In the travel trade, the following technology applications enable MC implementation (Anite, 2003 and 2002):

- ♣ Flexible booking systems implementing a variety of operations, e.g. package tour operating, airline consolidating, accommodation only, multi-supplier component-based selling;
- ♣ Integrated links to third party inventory-reservation systems: for pulling inventory from multiple external sources simultaneously in real time and dynamically package it with both internal and other external inventory
- ♣ Integrated dynamic content and inventory management: a) for defining the behavior of the inventory within a package system and share common stores of inventory across multiple business units, brands, product lines, products and distribution; b) for hiding prices of individual components within the package price and revealing the pricing of all or select components (opaque and component pricing); and c) for defining a multi-component package as a single component within an inventory store and packaging that component with other components
- ♣ Integrated channel management systems: for defining specific inventory and product allocations, pricing and packaging rules to individual distribution channels, brands/product lines
- ♣ Dynamic costing systems: for automatically calculating (and recalculate) the cost and margin across inventory units as they are used (e.g. the cost per seat in a charter or risk inventory block droops each time a package is sold)
- ♣ Dynamic pricing systems: for dynamically recalculating package pricing as individual components are added, removed or modified
- ♣ Customer database, CRM systems: for recognizing customers and developing marketing strategies
- ♣ Integrated supplier contracting and brochure pricing systems that dramatically reduce the time to market for offerings
- ♣ Integrated accounting and automated supplier cost accounting
- ♣ Comprehensive decision support systems: MIS, web reporting, data warehouse and mining

As concerns the levels and types of MC, most authors have based their MC classification on the stage of customer involvement in the value chain process by proposing a continuous framework upon which MC may be developed; namely, MC can occur at various points along the value chain, ranging from the simple 'adaptation' of delivered products by customers themselves, up to the total customization of product sale, design, fabrication, assembly, and delivery. Pine et al (1995) identified four customization levels based mostly on empirical observation: collaborative (designers dialogue with customers), adaptive (standard products can be altered by customers during use), cosmetic (standard products are packaged specially for each customer), and transparent (products are adapted to individual needs). Lampel & Mintzberg (1996) defined a continuum of five MC strategies (and therefore MC levels) involving different configurations of process (from standard to customized), product (from commodities to unique) and customer transaction (from generic to personalized). Pine (1993) suggested five stages of modular production: customized services (standard products are tailored by people in marketing and delivery before they reach customers), embedded customization (standard products can be altered by customers during use), point-of-delivery customization (additional custom work can be done at the point of sale), providing quick response (short time delivery of products), and modular production (standard components can be configured in a wide variety of products and services). Spira (1996) develops a similar framework with four types of customization: customized packaging, customized services, additional custom work, and modular assembly. By combing these frameworks eight generic MC levels are created ranging from pure customization to pure standardization (Table 1).

RESEARCH AIMS AND METHODOLOGY

This paper aimed to examine the drivers-urgency of MC as well as to investigate the concept, applicability and implementation factors of MC implementation factors within the travel agent and tour operator sector. After reviewing the relevant literature, the concept, the drivers, applicability and implementation success factors of MC were identified as well as adapted within the travel trade sector. As MC is argued to be a business issue of high importance in the tourism industry, the paper also reports on the findings of an exploratory study investigating the perceptions of Greek travel agents and tour operators regarding the urgency-drivers of MC in the Greek market as well as firms' readiness to implement MC. To that end, a questionnaire was developed consisting of three sections: a) questions regarding firms' characteristics (size=number of employees; management arrangement=independent or part of a chain; and type of firm=brick and mortar, brick and clicks or virtual firms); b) questions regarding firms' perceptions regarding the urgency-drivers of MC in the sector/market as identified in the literature review; and c) firms' readiness to implement MC based on the MC implementation factors also previously identified. Construct validity was assured by multiple sources of evidence which revealed 'convergent lines of inquiry' (Yin, 1994). The sources used included literature, trade publications, interviews with professionals and direct observations. The questionnaire with a pre-paid self-addressed return envelop and a cover letter explaining the purpose and confidentiality of the research (also signed and enforced by the president of HATA) were posted or e-mailed to the managers of a random sample of 600 travel agents and tour operator firms operating in Greece taken from the HATTA (Hellenic Association of Travel Agents and Tour Operators) directory. After a follow-up, 196 usable questionnaires were returned giving a respectable response rate of 32.6%, which was mainly due to the co-operation and professional relationship of the researcher with HATTA.

Table 1
Generic Levels of MC in the Travel Trade Sector

MC generic levels	MC approaches Pine et al. (1995)	MC strategies, Lampel & Mitzberg (1996)	Stages of MC Pine (1993)	Customization Types Spira (1996)	MC in travel trade
8. Design	Collaborative, transparent	Pure customization			Collaborative design between supplier-customer
7. Fabrication		Tailored customization			FIT based on basic products designs
6. Assembly		Customized standardisation	Modular production	Assembling standard components into unique configurations	Dynamic packaging
5. Additional custom work			Point of delivery customization	Performing additional custom work	Customizing features/services
4. Additional services			Customized services, quick response	Providing additional services	Personalised services, e.g. SMS for flights cancellations, delays
3. Packaged and distribution	Cosmetic	Segmented standardisation		Customizing packaging	Distribution Channel management systems
2. Usage	Adaptive		Embedded customization		Adaptation of pre-defined packaged tour
1. Standardisation		Pure standardisation			Pre-defined standard packaged tour

DATA ANALYSIS AND DISCUSSIONS

The respondents' profile reflected the structure of the Greek travel trade industry, i.e. highly fragmented with small operators and chain operators. So, 48% of respondents employed between 1–20 employees, 33% between 21–50 and the remaining (19%) more than 51; 78% represented independent operators and 28% were part of a chain; also 40.8% represented brick and mortar firms while 59.2% were virtual firms as well as traditional firms that have developed an e-commerce website (brick and click firms). This also reveals the low internet adoption in the Greek travel trade sector.

Table 2 provides data regarding respondents' perceptions regarding the urgency-drivers of MC in the Greek travel trade sector and market. Data reveal that although respondents recognize and are aware of the new technological possibilities and their flexible operating systems enabling and supporting MC practices, a great percentage of respondents also reported negative perceptions regarding the possibility and the driving force of new technologies to develop a flexible global travel system linking suppliers, intermediaries and customers. The development of such a travel supply chain system has been widely referred as a super PNR system, which would enable dynamic, real time and flexible packaging and product bookings until the last minute. However, the reported negative perceptions are not surprising when considering that the development of such a system has been hindered by legacy systems, systems incompatibilities, proprietary systems and systems integration problems amongst the technological applications of different tourism players. Moreover, although a great percentage of respondents recognized the current demand trends regarding increased requests for product variety and personalized products as significant MC drivers, a great percentage of respondents also reported negative perceptions regarding customers' willingness to participate in the collaborative design of personalized tourism products. Such issues raise concerns regarding the readiness of travelers to become prosumers (consumers and producers) and to invest time, efforts and resources for participating in the production process. MC success and adoption is also dependent on customer acceptability and willingness, while current privacy and security concerns deter customers' releasing, sharing and providing firms with personal information regarding their profile and preferences for personalization purposes. Finally, data also revealed that respondents also regarded the competition levels and the reduction of commissions, as MC drivers as MC can provide a new competitive and differentiation strategy nurturing new revenue streams.

Table 2
Respondents' Perceptions of the Urgency-Drivers of MC (% of Respondents)

Drivers	Strongly Agree		Strongly Disagree			Brick & mortar; 80 companies (mean)	Brick & clicks and virtual; 116 firms (mean)	t-test
	1	2	3	4	5			
Technological solutions enable flexible operating systems	19	34	16	22	9	3.22	2.89	0.002*
Technological solutions enable customer participation in the design process	14	28	23	21	14	3.43	3.09	0.001*
Technological solutions support flexible and efficient travelers' self-service systems	18	37	21	13	11	3.39	3.08	0.004*
Technological systems enable the creation of flexible global travel systems linking suppliers, intermediaries and customers	9	12	20	35	24	3.91	3.86	0.155
Travelers are increasingly requesting increased variety of tourism products	24	19	16	21	20	3.84	3.77	0.438
Travelers increasingly request/demand one-to-one personalization of travel products	21	20	23	17	21	3.74	3.81	0.571
Travelers increasingly travel independently	13	15	21	27	23	3.63	3.71	0.495
Travelers increasingly want to participate in the design of personalized travel products	11	14	24	28	23	3.81	3.45	0.002*
Competition has intensified and new competitive business models are required	14	19	29	23	15	3.92	3.55	0.003*
Commissions have been decreasing and new revenue streams are required	17	12	24	23	24	4.01	3.74	0.001*

A t-test was also conducted for investigating any significant differences amongst respondents' perceptions representing brick and mortar companies (86 firms) and brick and click as well as virtual firms (116 firms). The last two categories were merged as they represented companies making use of technology tools and as technology was previously

illustrated to affect MC adoption and implementation. As data reveal, respondents' perceptions did not significantly differ apart from the perceptions regarding technological drivers enabling flexible operating and self-service systems enabling customer participation in the production process, as well as the perceptions regarding customers' willingness to participate in the personalization process, the competition levels and the commission reductions. Such findings may also confirm the fact that awareness of technology's capabilities to enable and support MC strategies is a critical factor not only for MC adoption but also for new technologies adoption and exploitation, i.e. the development of an Internet business model and implementation of travelers' value added services and solutions.

Table 3 provides data revealing the readiness of respondents to implement MC practices. Overall, findings highlight that travel agents and operators need to do much more in all MC implementation factors and issues. Employee and customer participation have been found to be the most heavily used and exploited resources for achieving MC, while suppliers' participation and technological exploitation are the factors representing the least contribution to MC practices. Supplier participation is required for developing a responsive, flexible and agile travel supply network and system, while scalable, flexible and open system architectures and applications are required for gathering, distributing, analyzing/mining, updating and using customer and company intelligence.

Table 3
Respondents' Readiness to MC Implementation (% of Respondents)

Drivers	Great extent			Low extent		Brick & mortar; 80 companies (mean)	Brick & clicks and virtual firms; 116 firms (mean)	t-test
	1	2	3	4	5			
To what extent your travel suppliers participate in the MC of your products?	5	9	17	32	37	4.23	4.09	0.615
To what extent your customers participate in the customization of their products?	18	24	21	18	19	3.87	3.49	0.004*
To what extent your employees can customize products for meeting individual travelers' needs	21	17	25	20	17	3.69	3.78	0.438
To what extent employee empowerment is used for customizing products and meeting travelers' needs	11	15	19	27	28	3.95	3.84	0.682
To what extent firm culture supports product MC	17	12	21	23	27	3.78	3.71	0.931
To what extent firm culture enables customer data sharing/distribution for enabling MC processes?	11	9	29	31	20	4.11	4.03	0.371
To what extent do you use the internet for enabling your customers to customize their products ?	17	21	18	29	15	3.81	3.68	0.004*
To what extent your technological applications support your MC practices?	11	9	14	34	32	4.01	3.79	0.001*
How flexible, scalable and open are your technological applications for supporting MC processes?	8	12	19	36	25	4.11	3.82	0.002*
To what extent do you reuse customer information for MC your products (e.g. collaborative filtering?)	14	12	18	33	23	3.94	3.81	0.062
To what extent is company information and intelligence available for supporting your products MC?	12	11	18	28	31	3.87	3.65	0.373
To what extent your company information and intelligence is reliable, e.g. up-to-date and correct?	17	14	16	21	32	3.92	3.77	0.262

Moreover, a t-test examining any significant differences between brick and mortar companies and mortar and click as well as virtual companies revealed that the two respondents' groups differ significantly in four MC implementation factors: customer participation in MC; use of Internet for enabling customer participation; role of technology; and technology flexibility, scalability and openness to MC implementation. Brick & mortar and virtual firms reported higher contributions of the previous four MC implementation factors than brick & mortar firms. Such findings are consistent and also support previous findings arguing that the former firms adopted and exploited e-commerce systems for enabling customer self-service participation and involvement in the personalization process. Such firms view MC as a competitive strategy for creating value added customer services and revenue streams and for this reason, they have also invested in new and more flexible and capable technologies. However, the latter firms do not differ significantly in technology and information exploitation, which highlights the fact that technology investments are not exploited in their full potential. This is no surprising when considering previous findings illustrating low exploitation of Internet tools (Sigala, 2003) and low customer information exploitation and sharing (Sigala, 2005) in the tourism and hospitality sector.

CONCLUSIONS, STUDY'S IMPLICATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

Findings provide evidence of MC adoption and implementation readiness of travel agents and tour operators in Greece. Firms are currently at their early stages of MC adoption, while further and fuller exploitation of technology capabilities is required for achieving MC. This study also illustrated MC's potential, urgency and applicability within the travel agent and operator sector and has argued that MC is expected to become a major competitive strategy in the tourism sector. Businesses in this sector acknowledged MC importance to their competitiveness and satisfaction of their customers' needs and preferences. However, respondents exhibited a relatively low degree of readiness of their organisational and technological infrastructure, in terms of MC implementation resources. Equally important is also the indication that some respondents have already realised to some extent the potential of the Internet as the enabling technology for the development of new and more sophisticated MC applications than the ones that traditional players merely support. However, businesses need to adjust to new requirements necessary for the successful development of MC. Based on the results of this study the following proposed actions are suggested:

- ♣ Develop business models that reflect the interdependencies between services and resources such as IT applications, employees' knowledge, customers' requirements and behaviour.
- ♣ Develop a modular IT applications architecture, with each IT module supporting product and services' modules.
- ♣ This will increase the degree of reusability and flexibility of technological capabilities and it will facilitate the development of economies of scale in software production and the support of services production and management.
- ♣ Carry out process re-engineering studies so that business processes support the integration of the organisations and their customers and take into consideration issues such as flexibility and reusability which are needed for implementing MC. Particular important business areas are those related with the new product development.
- ♣ Understand and Communicate the Potential of the Internet for MC. Innovation should be encouraged, which coupled with the process re-engineering initiatives will yield highly valuable application that benefit from the support of the employees, the management and the customers.
- ♣ Prepare customers to support and accept MC, so that organisations will gain their support for collaboration. Identification and encouragement of groups of individuals who would be willing to participate in MC development initiatives.
- ♣ Facilitate planning for MC that would also engage IS, business staff and key employees.
- ♣ Organise employees' training about the concept of MC its implementation and the role of the Internet technologies.
- ♣ Organisations should facilitate the reconfiguration of their resources, by encouraging for example employees to participate in the management of groups of related services.

However, findings refer only to a specific context which is the Greek travel agent and operator sector. Future research may extend and further refine this study by conducting a large scale research and by investigating the following issues: additional factors (e.g. cultural, political) that may affect MC adoption, drivers and implementation in other countries / industries; specific factors that affect MC adoption within small and medium enterprises; (cultural) factors affecting customer adoption and acceptance of MC; employees' new skills and competencies required for achieving MC; organizational culture role and development for implementing MC; the appropriateness and applicability of different MC models and types for different firms, contexts and supply chain configurations.

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REBRANDED HOTEL PROPERTIES: THE ROLE OF SERVICE CLIMATE AND EMPLOYEE IDENTITY IN
PREDICTING CUSTOMER SATISFACTION

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ABSTRACT

Rebrandings have become commonplace on the hotel landscape, yet little academic research has been performed within this context. This paper proposes a conceptual model that links service oriented climate and employee identification with customer satisfaction. 228 employees in three hotels undergoing a rebranding process in Australia completed a self report survey. Hierarchical multiple regression analysis investigated the relationships between the variables of interest. Preliminary findings demonstrate the significant role of customer-contact aspects of service climate and the role of employee identification with their department in predicting employee perceptions of customer outcomes.

Key Words: Hotel rebrandings, service climate, employee identification

INTRODUCTION

Authors in service management often suggest an integrated approach to managing service quality, one that incorporates many elements of the service system to act in coordinated ways in order to produce service excellence which leads to customer satisfaction (eg. Dean, 2004; Gummesson, 1994; Lovelock, 1992). In reference to this integrated approach, much has been made of a service-oriented organisational climate and its role in enhancing customer experiences in service environments (Homburg, 2002). Research has revealed how employee attitudes towards and perceptions of customer service quality contribute to customer evaluations of the service experience (Johnson, 1996; Schneider & Bowen, 1985; Schneider, White, & Paul, 1998). In addition, researchers have sought to identify aspects of the organizational context that contribute to the development of service excellence, such as service leadership, rewards and recognition, and human resource practices (e.g., Johnson, 1996; Lytle, Hom, & Mokwa, 1998; Schneider, Wheeler, & Cox, 1992). A business with a *esprit de corp* toward service excellence has been shown to lead to higher levels of customer satisfaction – a known precursor for repeat visits, enhanced revenues and profits (Pugh, Dietz, Wiley, & Brooks, 2002; Schneider, Bowen, Ehrhart, & Holcombe, 2000; Wiley & Brooks, 2000).

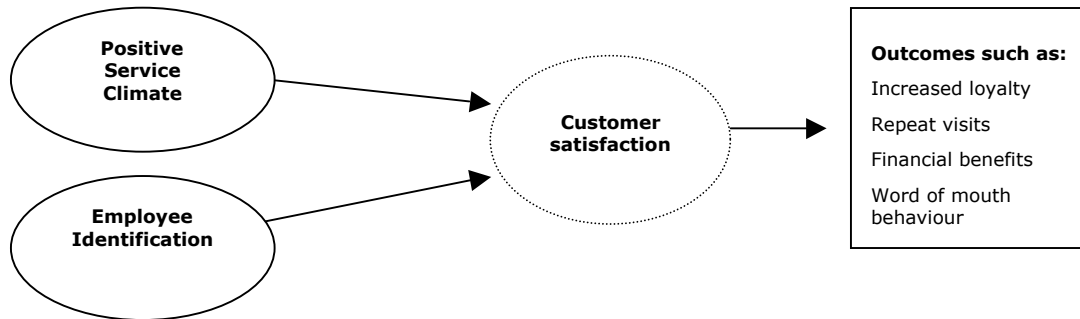
The hotel industry, one context in which services form a critical component of organizational success, is often characterized by high rates of failure and poor performance (Blanck, 2003; Dimond, 2004; Enz, 2002; France, 2002). Rebrandings (or ‘reflaggings’) are frequently employed as a strategy to help turn around performance. The maintenance of service quality during organizational change processes such as rebranding is a particular challenge for managers. During a rebranding, employees are particularly affected. This is significant because employees often *are* the product in services, so it follows that negative effects on employees during a rebranding can be particularly damaging to the likely success of the rebranding attempt, and in particular the maintenance of service quality. Rebranded hotels provide a useful context in which to explore employee attitudes toward service as this strategy is in effect a large scale organizational change process.

Research in the organizational behaviour literature highlights the relevance and importance of employee identification (at various levels) during change (Fiol, 2001; Fiol & O'Connor, 2002). Drawing on perspectives developed from Social Identity Theory (SIT; Hogg & Terry, 2000; Tajfel, 1982), some theorists argue that we must do more than study individuals *as individuals* and focus on a group level of analysis in understanding organizational behaviour. SIT proposes that an individual’s concept of self is built on personal identity based on one’s unique characteristics, and social identity which is derived from membership of salient social groups. These perspectives have not been previously applied to research in service organizations such as the hotel industry. Specifically, we examine whether a service-oriented organizational climate and employee identification predict employee perceptions of customer satisfaction in the context of a hotel rebranding process (see Figure 1).

A SERVICE-ORIENTED ORGANIZATIONAL CLIMATE

The term 'service orientation' (first introduced by Hogan, Hogan, & Busch, 1984) refers to a specific dimension of an organization's overall climate. Because multiple climates simultaneously exist within organizations, climate is most effective when used as a specific construct – a climate for something (i.e. innovation, safety or service) (Schneider, Gunnarson, & Niles-Jolly, 1994). Service climate is simply a very specific type of organizational climate. When the service climate dimensions are salient, the organization is said to have a positive service orientation (Lynn, Lytle, & Bobek, 2000; Lytle et al., 1998; Schneider & White, 2004).

Figure 1
Conceptual Model Linking Employee Identification and Climate to Customer Outcomes



Organizational climates are measured by soliciting employee's collective perceptions and opinions as to those events, practices, procedures, and behaviours in a workplace that are rewarded, supported and expected. A climate helps individuals determine how to behave based on the way they think and feel about various aspects of the work environment. Employees rely on cues from the surrounding environment to interpret events and develop attitudes (Liao & Chuang, 2004). In the case of a service climate, 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 et al., 1998). In one example of a rigorously constructed service climate scale, Lytle et al. (1998) reviewed the extant literature in order to identify 'best in class' service practices that represent a service climate (which they termed organizational service orientation). The review resulted in a framework that outlines four dimensions and ten fundamental elements of service orientation, and the authors describe the development of an instrument (SERV*OR) designed to measure the construct.

Service climate dimensions are contextual factors that support the delivery of personal service. The dimensions are geared closely towards aspects of customer satisfaction that are related to person-to-person service encounters rather than other aspects of satisfaction, such as hours of operation, billing, and location (Johnson, 1996). Because so much of the experience in the hospitality industry is directly linked to person to person interaction, service orientation is particularly relevant to the study of service within the hotel industry, and can be generalised across a range of other hospitality industries. This leads to our first research question: *Which dimensions of service climate are particularly salient in predicting employee perceptions of customer satisfaction during a rebranding process in the hotel industry?*

A service-oriented climate is particularly important because it has a strong relationship to customer satisfaction. A series of research projects created a link between employee perceptions of management practices (climate) matched against data from customers during a similar time period (Johnson, 1996; Schmit & Allscheid, 1995; Schneider & Bowen, 1985; Schneider, Parkinson, & Buxton, 1980; Schneider et al., 1998; Wiley, 1991). This research demonstrated a correlation between what employees say, customer's experience and what customers report, and, the specific aspects of employee experiences that most strongly relate to customer satisfaction.

A study of the relationship between employee attitudes and customer satisfaction in a service industry revealed that top management must take an active role in establishing and nurturing a service climate by showing direct support for employee welfare and service imperatives (Schmit & Allscheid, 1995). The study supports Schneider and Bowen's (1993) contention that when an organization promotes a quality atmosphere for service and for its employees, these efforts will result in positive customer experiences. These lines of research have taught us that there are a number of links that tie aspects of organizational climate and practices, employee perceptions, customer satisfaction, customer behaviours and

business performance. However, to date, the research has omitted to review the this relationship in the context of organization change. In addition, the role of employee identification has yet to be studied in relation to employee perceptions of service climate. The service climate literature fails to consider the role of identification as a key aspect in the attitudes and behaviour of employees. This paper investigates the milieu in which interactions between organizational actors, internal service quality processes, service capability, employee identification and a number of related dimensions serve as antecedents to customer service outcomes.

Employee Identification

According to social identity theory (SIT), an individual's concept of self is built on personal identity (one's unique characteristics as an individual) and social identity (derived from memberships in salient social groups and categories). Through categorization processes, people order and simplify their social environment by forming meaningful groups or categories of individuals. Furthermore, individuals identify with the groups or categories in which they see themselves as members, and identify with other persons they perceive as prototypical members of that group or category. Consequently, an individual's identity is based in part on the groups to which he or she belongs, and identification with these groups forms part of an individual's self-concept. An individual's membership of, and identification with, such social groups is crucial to understanding that person's attitudes and behaviour.

Within organizational contexts, employees are members of a number of groups, all of which are potential targets of identification. These groups include the organization itself, divisions, departments, or work units, as well as management teams, project teams, professional groups, or other informal groups (Paulsen, 2003). It follows that organizations can be the object of identification, just as other social categories based on nationality, race, class, occupation, sex, and religion. That is, organizational identification is a specific form of social identification.

The more strongly that employees identify with the organization, the more likely it is that this will guide their behaviour within the organization, and that they will act in the organization's best interests (Dutton, Dukerich, & Harquail, 1994; van Knippenberg & van Schie, 2000). In service environments such as the hotel industry, managers require employees to act in the best interests of the organization by delivering excellent customer service in line with hotel procedure. It is likely that the degree to which employees identify with the organization is a key factor in this process.

Whilst numerous studies have been undertaken to explore employee adaptation to changes in organizations (such as Jimmieson, Terry, & Callan, 2004), the current research investigates the effects of service climate and employee identification during organizational change. In particular, we are interested in whether employee perceptions of service climate and employee identification with the organization predict perceptions of customer service during a hotel rebranding process. Thus, two further research questions are: *Does employee identification with the organization predicts employee perceptions of customer service? Does employee identification with their department predict employee perceptions of customer service?*

METHODOLOGY

For the current research, data were collected from employees in three hotels undergoing a rebranding. At the time of the survey, each of the hotel properties was embarking on a rebranding strategy in order to turn around or improve performance and profitability. In the first, the hotel was repositioning itself from a four-and-a-half star rating to a three-and-a-half star rating hotel. The second hotel was privately owned and was joining a four-and-a-half star international hotel chain while retaining the same ownership. The third hotel, also privately owned, was sold to a well recognised regional chain at the same star level (four-star).

Sample

Surveys were distributed to 350 employees in three different hotels. In total, 228 responses were received from the employees of different departments in each of the hotels. This represents a response rate of 65%. The sample includes 85 males (or 37%) and 140 females (or 61%; 3 did not identify their gender). This compares favourably with the total population of staff in the hotel which consists of approximately 40% males, thus indicating that our sample is representative of the total population by sex. A similar check of human resource records indicates that the sample is also representative of staff employed in different areas of the hotels (e.g., housekeeping, kitchen, front office).

Measures

Our survey was designed to capture employee perceptions of various dimensions of the climate for service in each hotel. The survey also included measures of employee identification and employee perceptions of customer service. Respondents scored the items on a 7-point scale (1 = strongly disagree, 7 = strongly agree).

Service climate

In this study, we used the SERV*OR instrument developed by Lytle et al. (1998). This instrument contains 34 items and purports to measure ten key elements of service orientation. The instrument captures aspects of service climate that are likely to impact on customer satisfaction and perceived service quality. Furthermore, the current research context provided an opportunity to test the usefulness of the SERV*OR instrument in the hotel industry.

To our knowledge, this measure has not previously been applied to the hotel industry. Consequently, we checked the dimensionality of the SERV*OR instrument on our particular sample of respondents. We subjected all 34 items of the original measure to a factor analysis (principal factors, varimax rotation, eigenvalues > 1). A five factor solution explained 68% of the variance in the item set. The first factor contained items related to a number of elements in the original measure - customer treatment (e.g., 'employees go the extra mile for customers'), empowerment ('decisions are made close to the customer'), service vision ('there is true commitment to service, not just lip service'), and service failure prevention ('we actively listen to our customers'). While these are listed as separate elements of two different dimensions in the original SERV*OR framework, closer inspection of the items loading on this factor indicates that they are worded to reflect various aspects of customer contact and customer relations. We labelled this factor 'customer-centricity', and the 11 items were used to create a scale with a high level of internal reliability ($\alpha = .93$, $N=186$).

The second factor included items measuring the servant leadership element of the SERV*OR measure (6 items, $\alpha = .95$, $N=221$; items include 'management constantly communicates the importance of service'). The third factor to emerge contained the two items related to human resource management practices ($\alpha = .92$, $N=214$). The fourth factor contained three items designed to measure service recovery and three items related to service standards communication (6 items, $\alpha = .89$, $N = 213$). The final factor to emerge from the analysis contained the items for the SERV*OR dimension of service technology (3 items, $\alpha = .93$, $N = 219$).

*Links to SERV*OR dimensions.* As indicated above, the SERV*OR instrument purports to measure four dimensions and ten fundamental elements of service orientation. The analysis of our survey data did not directly replicate this structure. However, the five factors to emerge in our analysis are similar to the dimensions identified by Lytle et al. (1998). For example our 'customer centricity' factor consists primarily of items related to customer treatment, empowerment, failure recovery, and service vision. The items used to measure these elements have direct reference to customers and customer contact processes. The items measuring service rewards and service training relate closely to the human resource management dimension of SERV*OR. Similarly, elements that are linked to the idea of service processes and systems (standards and recovery) load on our fourth factor. Servant leadership (six items) loaded on a single factor in our study, as did service technology (three items).

Employee identification

Employee identification with the organization and with the work unit were measured using a four item scale developed by Doosje, Ellemers, and Spears (1995), which has demonstrated reliability in previous research ($\alpha = .83$). Two of the questions relate to membership of the group of interest and the other two items reflect strength of identification with the group. We included two sets of questions, each set containing four identical questions with one word changed to reflect the different sources of identification of interest to the study (e.g., 'I am pleased to be an employee of this *hotel*' and 'I am pleased to be a member of my *department*'). Our analysis of these items as a set indicated that the four items were not uni-dimensional. The two items relating to membership of the organization loaded on one dimension and the two items relating to strength of identification loaded on the other. In this particular sample of respondents, it appears that these items measure two aspects of identification – perceived membership of the group and strength of identification with the group (see Tajfel, 1982). Consequently, we combined these items to form two sets of indicators.

Perceptions of customer service

The survey also included two questions asking employees to estimate their customers' satisfaction levels. Previous research has shown a positive correlation between employee and customer perceptions of service quality (Borucki & Burke, 1999; Johnson, 1996; Schneider & Bowen, 1985; Wiley, 1991). Zemke (2002) highlighted a range of areas where employee perceptions and evaluations can be particularly valuable and accurate in creating a quality customer service focus. These include the employee perceptions of service focus, knowledge of customer expectations, as well as listening to and learning from customers. The two questions asking for employee perceptions ('in my opinion, customers of this hotel are generally very satisfied,' and 'in my opinion, customers of this hotel receive excellent customer service') were highly correlated ($r = .78$) and were combined to form a scale to measure employee perceptions of customer service ($\alpha = .88$).

RESULTS AND DISCUSSION

Descriptive statistics and intercorrelations for the study variables are included in Table 1. Coefficient alphas for each variable are included on the diagonal. There are significant correlations amongst all of the variables used in the analysis. In particular, we found positive correlations between perceptions of customer service and customer centricity, as well as service leadership. The service climate dimensions are positively correlated with each other. The correlations between organisational and department membership variables and perceptions of customer service are moderate, but significant.

To explore our main research questions, we conducted a hierarchical multiple regression analysis with perceptions of customer service as the dependent variable. This technique was employed to determine whether employee perceptions of service climate dimensions and then employee identification with department and organization, improved the prediction of customer service perceptions beyond that afforded by demographic variables. Results of the regression analysis are summarised in Table 2.

Table 1
Descriptive Statistics – Study Variables

Variable	Mean	SD	Correlations									
			1	2	3	4	5	6	7	8	9	10
1. Customer centricity	5.08	1.05	(.92)									
2. Human resource practices	4.26	1.54	.58	(.92)								
3. Service systems	4.40	1.39	.68	.72	(.89)							
4. Service leadership	4.90	1.48	.66	.71	.66	(.95)						
5. Service technology	4.15	1.60	.67	.51	.62	.58	(.93)					
6. Department membership	6.22	1.00	.45	.33	.32	.45	.30	(.87)				
7. Strength of ID (Department)	6.00	1.05	.37	.22	.29	.29	.22	.65	(.92)			
8. Organization membership	6.12	1.10	.51	.34	.25	.45	.35	.62	.32	(.78)		
9. Strength of ID (Organization)	5.71	1.03	.46	.29	.37	.35	.25	.45	.66	.36	(.80)	
10. Perceptions of customer service	5.23	1.33	.69	.49	.48	.58	.47	.46	.25	.49	.31	(.88)

Note: All correlations are significant at the 0.01 level (2-tailed). Coefficient alphas on the diagonal

Results indicated that the prediction of employee perceptions of customer service was significantly improved at each step of the analysis. A major improvement to the prediction over and above demographic variables occurred on the second step when service climate dimensions were entered into the equation (R^2 change = 0.48). In other words 48% of the variance in perceptions of customer service was explained by dimensions of service climate. Inspection of the standardised beta weights indicates that customer centricity (beta = .47; $p < .05$) was the only significant predictor while service leadership (beta = .14; $p = .072$) approached significance. The addition of the employee identification variables also significantly improved the prediction. However, the variance explained by the addition of these variables was relatively small (R^2 change = 0.03) with a significant beta weight on department membership (beta = .21; $p < .05$).

These results provide tentative insights into our research questions. It is not surprising that the elements of service climate most related to customer outcomes were those that relate directly to aspects of employee contact. Our 'customer-centricity' dimension includes such customer-related aspects as service encounter practices, degree to which employees are empowered to respond to customers, service failure prevention, and service vision. This result highlights the importance of maintaining a focus on customer service during a hotel rebranding process in order to ensure high levels of customer service. The dimension of service leadership approached significance as a predictor of customer service perceptions and indicates that managers have a critical role in ensuring that high levels of service are maintained. The more peripheral dimensions, such as service technology, service recovery and training did not predict employee perceptions of customer service. Because employees in service organizations see direct contact moments, or moments of truth (Carlzon, 1987) as 'pure', direct service opportunities, it is not surprising that these predict customer outcome perceptions. Employees do not

often see the process components of service (such as service systems, technology and training) as direct contributors to immediate customer outcomes (Gronroos, 1998), and this may explain why employee perceptions of these dimensions did not predict employee perceptions of customer outcomes in this study.

Table 2
Hierarchical Regression of Service Climate Variables, Employee Identification and Customer Satisfaction

Variables		B	Beta		
Step 1	Age	.02	.01		
	Sex	.39	.14*		
	Tenure	-.06	-.07	R ² change =.05	F _{3,213} = 3.81*
Step 2	Customer centricity	.61	.47**		
	Human resource practices	.08	.10		
	Service systems	-.07	-.07		
	Service leadership	.13	.14		
	Service technology	.03	.04	R ² change =.48	F _{5,208} = 42.34**
Step 3	Department membership	.28	.21*		
	Strength of ID (department)	-.16	-.13		
	Organizational membership	.08	.06		
	Strength of ID (organization)	.01	.01	R ² change =.03	F _{4,204} = 3.75*

Note: Regression weights when all variables entered in the equation; * $p < .05$; ** $p < .01$; N = 228

While employees identify with their employing organization to some degree, we know from prior research that the work unit or department is a primary source of identification for employees in many organizations (Haslam, Postmes, & Ellemers, 2003; Mael & Ashforth, 1992). Not only that, we also know from SIT that, when a higher order identity is under threat (such as an organization undergoing change) individuals focus on lower order identities (such as the work unit or professional group) as a primary source of identification. In many hotels or hotel chains, attempts are made to develop a strong image and organizational identity; however hotels are also strongly departmentalized service environments. In our research study, the degree to which hotel employees perceived themselves as members of their department contributed to the prediction of customer service perceptions. Thus it appears that the department is a more salient source of identification for employees than the organization itself during rebranding and that this identification predicts the assessment of customer satisfaction.

IMPLICATIONS

The results of this study suggest two important implications for service organizations undergoing change – the need to focus on service climate dimensions and the need to consider employee identification processes during change. This paper has focused on the need to better understand service climate within the context of organizational change, and to ascertain which dimensions of service climate are more salient in predicting customer outcomes. We have shown that the elements of service environment related to customer focus (or ‘customer-centricity’) are effective predictors of employee perceptions of customer service (Johnson, 1996; Susskind, Borchgrevink, & Kacmar, 2003). The implication for managers is to ensure that the focus on customer-centric elements of service climate is unflinching. In hotel rebranding processes, managers may lose sight of the importance of maintaining commitment to service levels, particularly in the early stages of change. In their discussion of excellence, Peters and Waterman (1982) highlight the importance of remaining ‘close to the customer’ and maintaining an ‘obsession’ for service excellence. However, managers should not neglect ‘behind-the-scenes’ aspects of service that are also relevant for a holistic service quality approach (Gronroos, 1998, 2000).

The focus on employee identification in organizations is of particular interest to this research. Organizational change, by definition, threatens a person’s fundamentally held beliefs (Huy, 1999), making clear the reasons why individuals or groups would not necessarily engage in change unless they were forced to do so. Organizational change processes are threatening to people for many reasons, including the effects the process may have on employee self-esteem and stability, but also because it disrupts a person’s sense of identity with those around them (Hogg & Terry, 2000).

Rebranding is a common form of organizational change in the hotel industry. As indicated above, rebranding involves a change of image and organizational identity. In the process, employees are often required to leave behind their commitment and attachment to the 'old' hotel and identify with the 'new' hotel. However, in order to reduce uncertainty during a rebranding process, employees are likely to 'play down' their identification with the organization as a whole and identify more strongly as a member of their department (Ashforth & Mael, 1998). This process may assist employees to adjust to the 'new' hotel, and it may also assist them to maintain their focus on customer service. While we might expect that employees would identify with the hotel or the hotel company, our findings demonstrate that identity at the departmental level, rather than the organizational level, plays a predictive role in how employees perceive a firm's capacity and capability to provide customer service. Even when employees may be uncertain about the changing identity of the hotel, they can still focus on producing effective outcomes at the department level.

Managers of change processes in people-intensive service businesses would be well-served to use this finding to their advantage. Managers cannot afford to ignore the importance of the connections employees feel to the departments in which they work, especially during change. Managers need to acknowledge the contribution that each department makes to the desired outcome and to validate the importance of each department to the change process. During a rebranding process, not only is it important to emphasise the 'new' hotel as a valued source of identification for employees, but also to acknowledge the importance of the commitment employees have to their departments, which in turn influences their desire to maintain standards of excellence. In fact, Fiol (2002) proposes a co-evolutionary identity change model that takes account of the shifting identification of employees during change. The model suggests that disparate beliefs can coevolve over a period of time, leading to a new identity for the organization with which employees can identify. Eventually, the strengthened identity becomes a platform for further enhancing the change process.

FUTURE RESEARCH

While service climate has been a topic of academic research for many years, it has yet to be applied to diverse settings and contexts. The study in this paper is one attempt to do this. Future research into service climate should continue to refine the dimensions of service climate and the scales used to measure them. For example, our analysis of the SERV*OR measure did not directly replicate the structure developed by Lytle et al. (1998). Nevertheless, while we did not find the ten elements of service orientation identified by Lytle et al. (1998) in our analysis, the five dimensions to emerge were not inconsistent with that framework.

Research seeking to link internal process issues directly to the 'bottom line' is gaining empirical strength. Research in this field demonstrates that a service organization is a 'process' organization whereby employee attributes, attitudes, behaviour and consequences are part of the service process. This process adds to the atmosphere for customer service and has subsequent impacts on sales and profits (Schneider & White, 2004). However, a further extension to our work would be to link the research on service climate dimensions with employee and customer perceptions of satisfaction and quality simultaneously (see earlier studies by Schneider & Bowen, 1985; Schneider et al., 1980). Employees have shown the ability to offer a reasonable assessment of customer satisfaction (Johnson, 1996), however, a direct link to customer perceptions of service would allow for direct examination of this link. Similarly, this work needs to be extended to include measures of business outcomes, such as profitability, customer repeat business (or repurchase intentions), and customer WOM communication.

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COST AND MARKET BASED ROOM PRICING MODEL: AN EMPIRICAL TEST WITH FULL-SERVICE HOTELS

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ABSTRACT

Gu (1997) proposed a hotel room-pricing model for maximizing before-tax profits that considers both costs and demand features. This study tested the Gu model using the data of eight hotels in Southern California. A negative relationship between rooms sold and room rates was found for the hotels with monthly data. The results show that the model is applicable to monthly rather than daily data, due to the nature of monthly rooms sold and ADR being void of major group or event fluctuations.

Key Words: room rate, rooms sold, variable cost, profit optimization

INTRODUCTION

Today's hotel room pricing models are cost or market based. Gu (1997) notes that cost-based models tend to ignore market influences, whereas market-based models are apt to neglect costs. Lewis and Shoemaker (1997) suggest adjusting costs once market sensitivities determine a price range. Evidently, there is a need for a model that considers both costs and market forces. One such model that attempts to consider both costs and market forces is the model proposed by Gu (1997). This study tests the Gu model using real hotel data and provides several useful applications and suggestions for future research.

Hotel developers first used the cost-based room pricing approaches to find ways of earning a return on their investment. Market forces are often ignored in these cost-based approaches. Arbel and Woods (1991) emphatically showed the fallacies of these approaches. The next wave of room pricing was the yield management concept that hotels learned from the airline industry. Room prices fluctuate according to supply and demand. Costs are ignored in setting prices with the yield management format. A more recent approach is to directly survey customers to find a range of acceptable prices. This approach then assumes that costs will be adjusted to be in line with the market driven prices (Lewis and Shoemaker, 1997).

In this context of competing theories for room pricing, Gu (1997) theorized that lower room prices would sell more rooms and vice versa. Gu's second underlying assumption is that all costs can be identified as fixed and variable and that undistributed operating expenses (administrative and general, sales, promotion and advertising, property maintenance and repairs, and energy) can be allocated to the rooms department. Gu's model is the first attempt to link average daily rate (ADR), rooms demanded, and variable operating costs in a compact quadratic equation. The model was presented as a basis for further testing and refinement.

If models such as the Gu model are not tested and refined, prices may be set using exclusionary methods. Developers may continue to set prices based upon investment at the exclusion of market forces. Hotel executives may set prices according to market forces without considering the impact of costs. The consequences of ignoring either costs or market forces include over and under pricing. In the worst-case scenario, low prices could force a hotel into bankruptcy, because costs could not be adjusted sufficiently to the low prices. Operating executives using the yield management approach may adjust prices to the point of confusing and alienating customers (Lewis & Shoemaker, 1997). A more comprehensive approach with both costs and market forces considered may yield greater profits over the long-term.

The Gu model demonstrates that prices can be derived through a careful use of occupancy, ADR and variable cost information. There are important implications regarding the use of highly fluctuating daily data for estimating room demand. A best-fit model was found, which shows positive pricing opportunities. Using the Gu model as a room-pricing baseline in combination with customer-oriented approaches is recommended as continuing research refines the process.

HISTORICAL PERSPECTIVE

The traditional hotel cost-based pricing model is known as the \$1 per \$1,000 approach (Schmidgall, 2002). In other words, for every \$1,000 in per room capital investment, the price of a room should be increased by \$1. Using this approach, a 300-room hotel costing \$30 million to construct, or \$100,000 per room, should be priced at \$100 per room per night.

Another frequently used cost-based room pricing model is known as the Hubbart Formula (Arbel & Woods, 1991; Coltman, 1987). This is an eight-step process using the figures from a one-year reporting period. The first step is to find the desired profit by multiplying the desired rate of return by the owner's investment. The second step calculates pre-tax profits by dividing desired profit by the hotel's tax rate. Steps Three, Four, and Five determine all costs and revenues of the hotel. Step Six calculates room division revenue to cover all costs and provide a reasonable return on capital. The seventh step calculates anticipated rooms sold. The final step determines the room rate by dividing the rooms revenue from Step Six by the anticipated rooms sold in Step Seven (Arbel & Woods, 1991).

There are two market factors, fierce competition and extensive market segmentation, that make these two cost-based room pricing approaches less useful (Gu, 1997). In essence, hotel rooms of various hotel segments (economy, mid-scale, deluxe, upscale, etc.) represent fairly similar products to a traveler wanting a good night's rest away from home. There has been a significant increase in economy and mid-scale hotel products during the last ten years. These economy and mid-scale products have competed with and challenged full-service hotel pricing processes.

The second group of hotel room pricing methods revolves around the yield management concept. Room rates are adjusted according to the room demand for future arrival dates. Basic economic principles are applied to pricing and room inventory control. Prices are lowered when demand is weak, and prices are raised when demand is strong. This generally means that discounts are more available further away from the arrival date, and that prices increase as the arrival date gets nearer. The yield management theory is based on being able to impact hotel room demand by raising and lowering the price of hotel rooms (Relihan, 1989).

The first step in evaluating hotel room demand for yield management is to segment the market into transient, group, and contract categories. Group and contract rates are set between hotel sales managers and meeting planners and airlines far in advance of arrival dates. Yield management, then, focuses on the transient traveler, which can also be divided into price-insensitive and price-sensitive categories. The idea of yield management is to sell as many rooms as possible at high rates to the price-insensitive traveler. Then, sell as many incremental rooms as possible or available to the price-sensitive traveler by offering discounted rooms (Orkin, 1990).

The third group of hotel room pricing focuses on the customer and what price s/he is willing to pay. The advice to hotel operators from Lewis (1986) represents this group of theories. "Set prices fairly, stick to them, and tell customers what they'll get for their money. Then make sure customers get what you promise." The focus of this approach is to maintain stable prices so as not to confuse the customer with frequent price changes.

One customer-oriented room pricing approach measures price sensitivity (Lewis and Shoemaker, 1997). The price-value level is discovered as customers are asked to find at what rate a hotel is priced too expensively or too cheaply. The range between expensive and cheap is the "proper" price for that hotel. Costs should then be adjusted to make a profit based on the customer-oriented price (Lewis & Shoemaker, 1997).

Gu Model Derivation

The Gu (1997) model was derived in the environment of the growing need to consider market forces and the recognized inadequacy of the cost-based approaches to do so. The first assumption of the Gu model is a negative relationship between rooms sold, an indicator of room demand, and room rates. In other words, as room rates rise, rooms sold decrease, and vice versa. Evidently, this assumption is based on the law of demand, which holds that the consumer is willing and able to buy more of a good or service the lower the price (Maurice and Smithson, 1985). The second assumption is that fixed and variable costs can be identified. Mixed costs can be separated into fixed and variable components using a regression approach as proposed by Schmidgall (2002). The final assumption is that undistributed operating costs can be properly allocated to the rooms department (Gu, 1997).

The first step in the Gu model development is a demand function depicting the first assumption represented by the equation below:

$$D = \alpha - \beta r \quad (1)$$

In the equation, D represents the daily demand for rooms, and r is the room rate. Alpha is the potential demand for rooms when rooms are free. Beta is a measure of the price sensitivity of the demand. In other words, as room price or rate, r , increases by \$1, the rooms demanded, D , would decline by β .

The next step adds costs to the equation. The pre-tax rooms department profit, π , is the product of rooms sold or demanded, D , and room rate, r , less all the related rooms operation costs, C , represented by the equation: $\pi = Dr - C$. Continuing with the second assumption, C can be separated into variable costs per room sold, v , and daily fixed costs, F . Combining the first two model development steps, and substituting v and F for C , yields the quadratic equation:

$$\pi = -\alpha v - F + (\alpha + \beta v)r - \beta r^2 \quad (2)$$

This quadratic equation is a parabola that indicates a maximum pre-tax room profit. By taking the first derivative of π with respect to r , the r that maximizes π can be identified. This first derivative equation is:

$$\pi' = (\alpha + \beta v) - 2\beta r \quad (3)$$

At the top of the parabola, which represents the maximum pre-tax room profit, the slope or the line tangent to the curve is zero. By setting the first derivative, π' , to zero, the rate that maximizes pre-tax room profits, r^* , can be identified. The Gu (1977) model for identifying the optimal rate, r^* , that will maximize pre-tax room profits, is summarized below:

$$r^* = (\alpha + \beta v)/2\beta \quad (4)$$

where: r^* = optimal room price

α = potential demand for rooms when the room rate is 0

β = a measure of the price sensitivity of demand

v = variable costs per room sold

As shown in Equation 4, fixed cost is not a relevant factor in determining the optimal rate. According to Gu (1997), by nature, fixed cost is a sunk cost in the room pricing process. In the equation, if variable cost per room is held constant, the optimal room price will decrease as the customer's price sensitivity, β , increases. When price sensitivity is lower, the optimal room price should be higher.

DATA AND METHODOLOGY

One of the primary reasons for the Gu (1997) model not to have been tested up to this point was the difficulty in obtaining hotel specific occupancy and ADR data. In this study, the data collected is a convenience area sample from Southern California. Many general managers were very cooperative in allowing the collection of their occupancy and ADR information.

All of the data are from eight full-service hotels ranging from 300 rooms to over 1,000 rooms. The markets these hotels serve are primarily convention, leisure, and transient business. The hotel locations range from near the beach, to near an airport, to near a convention center. They are all national brand affiliated hotels that practice yield management.

The study included both monthly and daily data to test which time periods would best indicate the negative relationship between room rate and rooms sold. Two months of daily data, or approximately 60 observations, from seven full-service hotels were collected. The fourth quarter of 2001 was specifically excluded in collecting data so as to avoid the worst of the September 11 impact. The time periods tested are noted in Table 1. The data was taken from the daily revenue reports and month-end financial statements of each hotel.

Five hotels were used to test the long-term relationship of room price and rooms sold. Occupancy and ADR data from these hotels were collected for a consecutive 60-month period from the month-end statements of income. The correlation for daily and monthly data between number of rooms sold and the ADR for each of the eight hotels was tested.

Variable cost information for the corresponding periods of the rooms sold and ADR was also collected. The cost information was from the month-end statements of income. For the hotels from which two months of data were collected, the two months of revenue and costs were summed in order to calculate variable costs. In the case of the hotels with sixty months of data, all sixty months of revenue and costs were summed for the basis of variable cost calculations.

An allocation of undistributed operating expenses was calculated. The allocation was based on the percent of rooms' revenue to total revenue. Allocation bases such as square footage and number of employees were not available. The allocated undistributed operating expenses were then regressed against actual rooms sold to calculate a fixed portion as suggested by Schmidgall (2002). The remaining undistributed operating variable costs were then added to the rooms'

variable costs. Room's department labor and other expenses were also regressed against actual rooms sold to calculate a fixed portion. The room's labor and other expenses minus the fixed portion were considered room's variable costs. The sum of the rooms' variable costs and the undistributed allocated variable costs was then divided by actual rooms sold to obtain a total variable cost per room sold.

To control for the impact of seasonality on demand for rooms, seasonal adjustments were made to daily and monthly rooms sold to account for seasonal variation in occupancy due to factors such as weekends or holidays using the centered moving average method proposed by Anderson, Sweeney, and Williams (2001). A daily seasonal index of rooms sold was derived for each of the seven hotels providing daily data, and a monthly seasonal index was calculated for the hotels furnishing the monthly data. Then, the actual rooms sold of each hotel were divided by its relevant seasonal indexes to arrive at the deseasonalized rooms sold.

A critical assumption of Gu's (1997) model was that the demand for rooms is negatively correlated with the ADR as specified by the demand function, $D = \alpha - \beta r$. Therefore, the correlation between deseasonalized rooms sold and ADR of each hotel was first examined. The Pearson correlation between the two variables for each hotel was calculated and tested. A significant and negative correlation between rooms sold and ADR is a necessary condition to indicate that proper market forces are in place to test the Gu model. For hotels displaying significantly negative correlation between rooms sold and ADR, regression was run with rooms sold as the dependant variable and ADR as the independent variable to estimate the α and β parameters as specified in Equation 1. Finally, combining the estimated total variable cost per rooms sold with estimated α and β , the optimal ADR was determined based on Equation 4.

In the regression to estimate α and β parameters, tests were conducted to make sure that necessary regression assumptions were met. The Jarque-Bera statistic was calculated and tested to check the normality of the dependant variable or rooms sold. A low P value associated with the statistic would lead to the rejection of the null hypothesis that there is a normal distribution. Since our regression model involves time-series data, the Breusch-Godfrey test, which is a Lagrange multiplier (LM) approach, was used to examine autocorrelation of the regression error terms. The null hypothesis of the test is that there is no autocorrelation, or the error terms are independent of each other. A significant test statistic with a low P value would show that autocorrelation exists. The final regression assumption test was for non-constancy of variance, or heteroskedasticity, of the dependant variable, or rooms sold. The test used was the White test. The null hypothesis of the test is that the variance of the dependant variable remains constant when the value of the independent variable changes. A significant test statistic would reject the null hypothesis and indicate heteroskedasticity.

The White test has some additional test advantages of model specification as stated in the Help section of Eviews, the software used for statistical analysis in this study: "White also describes this approach as a general test for model misspecification, since the null hypothesis underlying the test assumes that the errors are both homoskedastic and independent of the regressors, and that the linear specification of the model is correct. Failure of any one of these conditions could lead to a significant test statistic. Conversely, a non-significant test statistic implies that none of the three conditions is violated" (Eviews, 1994-1999).

FINDINGS

Table 1 provides the Pearson correlation coefficients between rooms sold and ADR of the eight hotels and their significant levels of two-tailed tests. Four of the five hotels that provided the monthly data show a significantly negative correlation between ADR and rooms sold. The daily data from Hotel 3 also demonstrates a negative relationship between ADR and rooms sold, but the correlation is not statistically significant. The other correlation tests for hotels providing daily data were all positive and significant at the 0.01 or 0.05 level.

Table 1
Pearson Correlation Coefficients between Rooms Sold and ADR

Description	Hotel 1	Hotel 2	Hotel 3	Hotel 4	Hotel 5	Hotel 6	Hotel 7	Hotel 8
Test Period								
Daily		A&S 01	J&F 02	J&F 02	J&A 01	J&F 02	M&A 01	M&J 01
Monthly	96-00	96-00			96-00	96-00		96-00
Pearson								
Daily		0.56**	-0.01	0.32*	0.27*	0.34**	0.49**	0.42**
Monthly	-0.44**	-0.27*			-0.32*	0.20		-0.57**

** Significant at the .01 level. * Significant at the .05 level.

Time periods: January 1996 to December 2000; August & September 2001; January & February 2002, July & August 2001; March & April 2001; May & June 2001.

One hotel (Hotel 6) had a positive but insignificant correlation between monthly ADR and rooms sold. It appears that this hotel is part of a brand that successfully utilizes vertical market segmentation within the brand, regional reservation and sales processes, yield management, and frequent guest recognition programs that effectively circumvent normal demand functionality.

Since Hotels 1, 2, 5, and 8, were the ones that had a significantly negative correlation between monthly rooms sold and ADR as assumed by the Gu (1997) model, a regression was run for each hotel with rooms sold as the dependant variable and ADR as the independent variable to identify the α and β parameters as specified in Equation 1. The estimated demand models for Hotels 1, 2, 5, and 8, with the respective α 's and β 's, are displayed in Table 2. For other hotels, as no significant and negative relationship was found between rooms sold and ADR, regression was not run to estimate the demand function of $D = \alpha - \beta r$.

Table 2
Regression Models for Four Hotels

	Hotel 1	Hotel 2	Hotel 5	Hotel 8
Alpha (Constant)	15,085.60**	11,417.70**	8,555.03**	14,203.55**
Beta (Coefficient of IV)	-47.99**	-29.80*	-20.86**	-41.67**
F-Statistic	16.68**	5.23*	7.72**	39.40**
Adjusted R Square	0.21	0.07	0.10	0.39
Jarque-Bera	0.73	0.87	0.39	0.85
Breusch-Godfrey	0.07	0.07	0.25	0.33
White	0.38	0.47	0.67	0.49

** Significant at the 0.01 level. * Significant at the 0.05 level.

The values indicated for Jarque-Bera, Breusch-Godfrey and White tests are P values.

As shown in Table 2, the regression equations for Hotels 1, 2, 5, and 8, are as follows:

Hotel 1 $D = 15,085.60 - 47.99r$

Hotel 2 $D = 11,417.70 - 29.80r$

Hotel 5 $D = 8,555.03 - 20.86r$

Hotel 8 $D = 14,203.55 - 41.67r$

The models are significant at the 0.01 and 0.05 levels with an adjusted R^2 ranging from 0.07 to 0.39. The alpha and beta coefficients are significant at the 0.01 or 0.05 levels. The Jarque-Bera statistics have P values ranging from 0.39 to 0.87, suggesting that the null hypothesis of normality cannot be rejected. The Breusch-Godfrey statistics range from 0.07 to 0.33, suggesting that the null hypothesis of no autocorrelation can be accepted at the 0.05 level. The White test's P values range from 0.38 to 0.67, suggesting that heteroskedasticity is not present in the regression.

The estimated variable costs per room for Hotels 1, 2, 3 and 8 are \$33.93, \$37.42, \$43.48 and \$ 31.88, respectively. Based on Equation 4, the optimal prices for the four hotels are as follows:

Hotel 1 $\$174.15 = [15,085.60 + (47.99 \times 33.93)] / (2 \times 47.99)$

Hotel 2 $\$210.27 = [11,417.70 + (29.80 \times 37.42)] / (2 \times 29.80)$

Hotel 5 $\$226.79 = [8,555.03 + (20.86 \times 43.48)] / (2 \times 20.86)$

Hotel 8 $\$186.38 = [14,203.55 + (41.67 \times 31.88)] / (2 \times 41.67)$

At the end of the year 2000, the annual ADR for these hotels was near \$100. The hotel ADRs have been steadily rising over the past five years, but could rise even faster according to the Gu model.

DISCUSSION

The law of demand postulates that if the price of a room increases, the demand for a room decreases, and vice versa. Under this theory, the beta coefficient in the regression equation should be negative. Perhaps the most important finding of this study is that daily data has significant limitations. It was originally thought that one advantage of the Gu model was that it could easily be updated with recent occupied rooms and ADR data. However, this test discovered that several problems can arise with daily data.

First, the capacity issue causes a problem with daily data. With a finite number of rooms to sell in a given geographic area during a certain day of the week, or during a particular convention, the number of rooms sold does not decrease as the price rises. Most hotels use the yield management concept to some degree, which suggests that prices should be increased as demand for rooms increases. Hence, there were enough capacity issues over short periods of time to distort the theoretical negative correlation between rooms demanded and ADR, thus rendering the daily data ineffective.

A significant group or convention may highly impact the ADR and occupied rooms for a few days at a given hotel or group of hotels. Monthly ADR data, however, is apparently shielded from the short-term effects of a particular group or convention. Taking a longer-term look at hotel price and demand, one may find the logical negative relationship between rooms sold and ADR to be present.

Second, the positive beta coefficients of the remaining hotels indicate that besides the short-term capacity issue, other factors may have distorted or masked the normal relationship between room price and rooms sold. Ferguson (1987), and Lee and McKenzie (1998), argue that costs and market forces are not the only factors that affect pricing. There are also psychological, capacity, and customer interaction issues at work.

One customer-centered approach argues that the standard economic theory of high fixed cost and low marginal cost for hotel pricing is tempered by a customer effect. In other words, competition is not expected to drive down rates until excess capacity is eliminated. This customer effect is essentially that the value one consumer receives is influenced by other consumers. Two hotels of similar physical product in the same market illustrate this customer effect. One hotel has the reputation of being noisy, the other one of being quiet. By following this theory, the quiet hotel charges higher rates to attract guests willing to pay for a quiet environment (Lee & McKenzie, 1998).

Consumer purchase decisions often violate the negative price/demand relationship. One economic theory that helps explain consumer's deviation from the law of demand is Prospect Theory, which has two components: 1) people are more risk-averse when dealing with gains than when dealing with losses; and, 2) people assign more weight to highly probable outcomes than to low-probability outcomes (Ferguson, 1987). The application to hotels is that room pricing can take advantage of "psychology economics" by manipulating information and optimizing presentation of room prices. Such tactics diminish the normal functionality of price and demand interactions.

Finally, the price/demand relationship for the daily data from Hotels 2 through 8 may have been further distorted by the monthly seasonality for which the study was unable to control. The two-month daily data of the seven hotels allowed us to derive only seasonal indexes for the seven days of Monday through Sunday to control for the daily pattern of rooms sold within a week. It was impossible to derive 12 monthly seasonal indexes based on two-month data sets. Therefore, for Hotels 2 through 8, monthly variation in rooms sold due to seasonality was not accounted for, although their daily variation was neutralized by the deseasonalization using their seven daily indexes.

The adjusted R squared values for the significant models ranged from 0.07 to 0.39. This indicates that ADR explains a small to moderate portion of the variance in rooms sold for Hotels 1, 2, 5, and 8. This low explanation of variance may also indicate other psychological, capacity, or customer interaction influences. It is possible that additional factors need to be added to the regression equation if the purpose is to increase the explanatory power of the regression model.

CONCLUSION

The simple cost-based approaches of the past no longer work in today's complex and competitive market. Ignoring the importance of costs, however, may also be dangerous. Setting prices without variable cost information could lead to cash depletion. The yield management approach of raising and lowering prices, and tightening and loosening room inventory frequently can confuse and alienate customers. Psychological factors distort the normal functionality of price and demand interaction. The Gu (1997) model incorporates both market and cost approaches in room pricing and establishes a baseline for incorporating non-economic factors.

In this study, Hotels 1, 2, 5, and 8, meet all of the statistical significance tests and the Gu model criteria. The research and testing indicate opportunities for increasing prices at these four hotels. The price increases would yield substantial pre-tax profit increases, as the hotels studied have variable costs below \$48.

Hotels 2 through 8, or those tested with daily data, confirm that other factors influence the interactions of price and demand. Fixed capacity, or a fixed number of available rooms, is one such factor. During a particular event or day of

week, the number of rooms sold may increase as prices increase. This is the basis of the yield management approach.

Psychological factors also impact prices. Repeat guest programs, frequent guest rewards, and unique hotel characteristics influence customer decisions. All the eight hotels tested use psychological factors to some extent through their national brand affiliation and location.

This study indicates that using monthly data tends to smooth out the influence of capacity and psychological factors. Another possible approach is to isolate pricing of specific market segments. This is one advantage of the Lewis & Shoemaker (1997) price sensitivity approach

Hence, a pricing combination approach is optimal. Start with the Gu model. Then, the Lewis and Shoemaker (1997) price sensitivity range may initially help identify the highest customer acceptable price. Then, a non-alienating yield management approach would avoid offering too many discounts during high demand periods.

Another reason for starting with the Gu model using monthly data is that it is critical for hotel executives to calculate variable costs, so that no prices are extended below the variable cost level. Also, it may not be practical or possible to frequently test customer price sensitivity on a day-to-day basis. The Gu model may be used to provide a long-term guidance for room pricing that may help maximize hotel profits.

Additional research opportunities abound in room pricing. Suggested areas of research focus would be: 1) testing the Gu model for optimal pricing by market segment; 2) finding additional predicting factors for the regression equation and the Gu model; and, 3) comparing the various pricing approaches or combination of approaches for the optimal pricing solution.

The Gu model is successful in combining market and cost components, but relies on monthly data versus daily data, due to the nature of monthly rooms sold and ADR being void of major group or event fluctuations. Examining and testing pricing data by market segment may yield additional insights and relationships on ADR and rooms sold.

The price and demand relationship is apparently tempered by such factors as location, capacity, and consumer psychology. Identifying which of these factors influence ultimate pricing decisions would greatly improve the Gu model. Also, comparing the optimal price computed using the Gu model with the price obtained using other pricing models would be enlightening.

One final note is that the Gu model supports the current hotel pricing practice of setting high rack rates that are then discounted for volume and leisure guests. The Gu model indicates the optimal rate that maximizes pre-tax profits. The process of calculating variable costs and fitting the regression model provides the sophisticated framework for profitably discounting the optimal rate to volume and leisure guests.

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TRAVELER ACTIVITIES IN AIRPORT AND ONBOARD AIRCRAFT

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ABSTRACT

This study was to provide researchers and practitioners with a better understanding of the behaviors of international travelers in airports and during air travel. Data were collected through face-to-face interviews with 476 international travelers. The most frequently performed activities in departure airports were waiting and chatting; and the most common in-flight activities were reading, watching in-flight television/movies, and listening to in-flight programs or tapes. Differences in activity participation among travelers of various demographic and trip characteristic groups were examined. Suggestions for airport and airline management to better accommodate air travelers' needs and utilize revenue generating opportunities were provided.

Key Words: airport activities, in-flight activities, time in airports

INTRODUCTION

Every year, millions of air travelers pass through airports (about 600 million passengers in the USA alone) experiencing what could be considered as one of the archetypes of post-modern living spaces. The latest statistics on global passenger traffic indicated that airlines carried approximately 3 billion passengers in 2003; and the number is expected to increase by 10% in 2004 (Airports Council International, 2004; Bisignani, 2003). Indeed, these consumers spent a lot of time in airports and on aircrafts, moving quickly from one cultural and physical environment to another and suffering from jet lag and other related problems. Time and space are beginning to receive more attention from researchers. These two aspects have been used by Harvey (1989) and Lash and Urry (1994) to analyze the post-modern economy. Adam (1990, 1995, 1998) emphasized the need to take time and space into account simultaneously. Because of the increasing demand for travel and since airports may be considered as transition spaces, it is important to improve the understanding of how air travelers spend their time in this unstable and changing environment.

Bellanger and Devos (1997) have studied the different "times" involved in air travel. They consider that there are three psychological phases of the voyage. The first phase consists of hyperactivity of the future passenger, whose single aim is to make a success of the departure. This phase generates strong anxiety. The traveler must prepare his or her luggage and documents, take transport to go to the airport, find all useful information (e.g., access gates and delays), check in, and then pass through customs and police formalities to reach the departure lounge. During this first phase, the passenger is both an actor and active.

The second phase corresponds to the flight. Passengers can adopt a more passive attitude since they are no longer in charge of operations. They can let themselves be guided. Nevertheless, the stress does not disappear and can sometimes even be reinforced due to the fear related to boarding, takeoff and flight. The third phase is the return to reality at the airport of arrival. The stress, which is always present, results both from the tiredness of the voyage and the new obligations that the passenger must face (e.g., recovery of luggage, passing through police formalities, and finding a means of transport); and this sometimes happens in a completely foreign universe.

The same level of stress-anxiety may be observed during the travelers' stay in a foreign country. Different consumers may have different attitudes: some travelers are looking for variety (e.g., they want to discover the country and understand the culture) while others are looking for neutral/international references and/or references that remind them of their own country (e.g., looking for food they have already tried in their country or in other international hotels or restaurants).

According to Chebat and Venkatesan (1991), there are three different ways of taking time into account in consumer behaviour. The first approach is to analyse the way consumers allocate their time between the different activities they have to handle. The second approach focuses on how consumers perceive and react to waiting time. This concern has

been of particular interest for services. A final approach identified by Chebat and Venkatesan (1991) is about time orientation. This study took the second approach by investigating the activities participated in by travellers in airports waiting for boarding and on aircrafts waiting for arrival.

Practitioners have already identified major features of behavior, such as stress and anxiety, that are of great importance in “managing” and “controlling” travelers in stressful environments, such as airports or other unknown environments. A survey showed that 66% of air travelers found the departure airport experience the most stressful part of their journey (Walbrook, 2004). One of the reasons for having stress and anxiety while travel by air is that consumers might “get lost” in stressful and unknown environments with plenty of tasks (e.g., checking in, going through the immigration, and finding the right gate) to perform in a given time before departure. Since the increase in airport security due to concerns for terrorism, air travel has become even more stressful and less pleasant. To complete these tasks more effectively, airport management and airlines have invested in various areas to ensure that airport time is no longer associated with waste and constraint, but rather that it becomes time well spent. Gottdiener (2001) explained that, although airports remain dominated by their principal functions as gateways and transition spaces, they have evolved into multipurpose facilities. Many people spend productive time at air terminals whether they are shopping, working, attending meetings, or making use of business and communication services enabling them to get things done while in transit.

A review of literature found that past studies in the areas of airlines and airports were mostly related to airport infrastructure development, safety, technology, scheduling, and operation ((Daniel, 2001; Singh, 2002); airlines’ management of emergencies (Rosenberg & Pak, 1997); and passenger expectations of airline services (Gilbert & Wong, 2003). Only one study was located that studied a consumer behavior at the airport—shopping (Geuens, Vantomme, & Grengman, 2004). The study identified three types of airport shoppers: mood shoppers, shopping lovers, and apathetic shoppers. However, what travelers do in airports other than shopping has not been reported in the literature.

The purpose of the project was to provide researchers and practitioners with a better understanding of the behaviors of international travelers in airports and during air travel. Specially, the objectives of the study were to (1) identify activities carried out by travelers in departure airport and on aircraft and (2) examine differences in activity participation among travelers of various demographic and trip characteristic groups. A contribution of this study to the industry is to provide suggestions for airport and airline management to better accommodate air travelers’ needs and utilize revenue generating opportunities. An academic contribution of this study is the laying of a foundation for future research in an area where limited literature is available.

METHODOLOGY

A survey was conducted in the restricted lounge of the Departure Hall of the Hong Kong International Airport as part of an annual omnibus international traveller survey. The authors’ home institution was given permission by the airport authority for a period of two to three weeks each autumn to conduct survey in the departure gate area. Interviewers were required to provide information for a background investigation and were given permission to pass the immigration check point for the survey. Potential respondents of the omnibus survey first had to satisfy three criteria before they were qualified to participate in the interviews. Three filtering questions were asked to exclude residents of Hong Kong, transit passengers who did not leave the airport terminal, and those who were not residents of one of the seven target source markets. The seven source markets (the United States of America [USA], Australia, Western European countries, China, Taiwan, Singapore and Malaysia) represented the major inbound visitors to Hong Kong and corresponded to a good mix between long-haul and short-haul markets.

The questionnaire was initially developed in English and translated into Chinese by the survey team. Questions asked included activities participated in at the departure airport and on aircraft when travelled to Hong Kong, main trip purpose(s), travel companion(s), amount of time waited in departure airport, and amount of time spent onboard aircraft; these questions were phrased to address the just completed trip to Hong Kong. The average number of local/regional (i.e., in traveller’s own country or neighbouring countries) and international trips taken annually and demographic information were also obtained.

The final version of the questionnaire was vetted and edited by a professor in the hotel and tourism school at a Hong Kong university. Prior to carrying out the data collection, a pilot test was conducted to serve as a trial run of the survey at the airport. Interviewers also benefited from having a chance to familiarize themselves with the setting of the questionnaire and practice it in Mandarin and English with different visitors. After the pilot study, some procedural and questionnaire wording modifications were made accordingly. A team of fourteen interviewers including two field supervisors was hired to undertake interviews at the airport. The survey was conducted by face-to-face interviews.

The selection of specific flights as targets for interviews involved both judgment and practical considerations. There were only a few flights to the USA, Australia and Western European countries during the assigned time schedule. Each of these flights was then selected repeatedly over the study period. By contrast, there were more flights to China, Taiwan, Singapore and Malaysia. Flights known for carrying transit passengers were excluded from data collection. While flights to specific targeted markets were selected using judgment, the sampling of passengers involved a more scientific approach. A random number was assigned to a particular interviewer every day. These random numbers were used to identify the passengers seated around the boarding gate, and thus select them for interviews. For instance, the random number 2 indicated that the second, fourth, sixth and eighth passenger, and so on, sitting near the gate would be selected for an interview. This practice was applied as much as possible.

ANALYSIS AND RESULTS

A total of 476 interviews were completed. Descriptive statistics were calculated to provide a profile of respondents. Table 1 shows that respondents distributed quite evenly among the age groups; and there was a good gender distribution. Americans and Canadians represented over one-third of the respondents. Travelers reported a nationality of China, Taiwan, and other Asian countries represented over 40% of respondents.

As for trip profile, business (44.1%) or leisure (40.6%) was reported as the most popular reason for this trip, although some respondents traveled for both business and leisure (11.2%). The most common travel companions reported were friends and relatives (43.8%), followed by traveling alone (35.7%), while only 20.5% traveled with colleagues. The most common activities at departure airports were waiting and chatting (55.3%), followed by eating and drinking (45.3%), reading (40.2%), and shopping (37.1%). During flight, almost three-quarters (73.1%) of respondents read, watched in-flight television/movies, or listened to in-flight programs or tapes; another two-thirds engaged in waiting, chatting, sleeping (66.0%) and eating and drinking (61.5%). Only 14.3% worked onboard.

Respondents' travel experience varied significantly. The average number of local/regional flights taken, excluding the current trip, was 7.28 with a standard deviation (SD) of 13.89; and the average number of international flights taken, excluding the current flight, was 6.19 with a standard deviation of 9.88. On average, respondents spent 1.87 hours at the departure airport (SD = 1.09) and 7.05 hours onboard (SD = 5.94), although the reported flying time ranged from half an hour to 22 hours.

Differences in Activity Participation

Chi-square analyses were conducted to examine differences in activity participation by demographic and trip characteristics. As shown in Table 2, more male travelers performed work in departure airports and onboard aircrafts, while more female travelers waited and chatted. Young and middle aged (30-49 year old) groups were most likely to engage in work at airports and on airplanes. Young travelers (20-29 year old) were the most likely to shop in departure airports; and the 20-39 year olds were the most likely to eat and drink in departure airports. On the other hand, the 60 years and older group was the most likely to wait and chat in the airports, but least likely to work, chat, sleep, read, watch television, or listen to programs or tapes on airplanes. Different nationality groups also showed different activity patterns in airports and on airplanes. Western travelers (i.e., North Americans, Australians, New Zealanders, and Europeans) were more likely to eat and drink both in airports and on airplanes, compared to Asians. Americans were the most likely to work on airplanes.

Respondents traveled for business were most likely to work in airports and onboard aircrafts (Table 3); and leisure travelers were least likely to work and make phone calls, while most likely to wait and chat. Similarly, respondents traveled with friends and relatives were least likely to work and make phone calls and most likely to chat, eat and drink.

The number of flights taken per year was recoded into categorical variables. Local and regional flights were grouped as 0 (34.6%), 1-5 (35.7%), and 6 or more (29.7%) flights annually excluding the current trip. International flights were changed to 1 or less (43.0%), 2-4 (23.2%), and 5 or more (33.8%) flights annually excluding this trip. Frequent travelers, whether traveling locally, regionally, or internationally, were more likely to work in departure airports and on airplanes. This finding was consistent with the earlier reported result that business travelers were most likely to work in airports and onboard aircrafts because follow-up chi-square analyses showed that (1) local/regional frequent travelers (who took 6 or more flights a year) were most likely to travel for business (58.2%, $\chi^2 = 26.156$, $p = .001$), compared to those who took no local/regional flight (43.9%) or 1-5 local/regional flights (33.1%) annually; and (2) travelers who took 5 or more international flights annually were most likely to travel for business (56.3%, $\chi^2 = 22.358$, $p = .004$), compared to those who took 1 or less flights (36.3%) or 2-4 flights (41.8%) annually. Those frequent local/regional flyers were also the least likely to wait and chat or eat and drink at the departure airports, and most likely to read while waiting for boarding.

Table 1
Demographic and Trip Characteristics of Respondents (n = 476)

Characteristics	Percentage	Characteristics	Percentage
Age		Companion on this trip	
20-29	17.8	None	35.7
30-39	26.3	Friends and relatives	43.8
40-49	23.4	Colleagues	20.5
50-59	22.4	Activities at the airport on departure	
60 or over	10.1	Working (documents, laptops)	15.1
Gender		Shopping	37.1
Male	57.1	Waiting, chatting	55.3
Female	42.9	Making phone calls	20.3
Nationality		Eating and drinking	45.3
North America	35.8	Reading	40.2
Australia/New Zealand	6.4	Activities onboard	
Europe	14.1	Working	14.3
China	12.0	Eating and drinking	61.5
Taiwan	10.6	Waiting, chatting, sleeping	66.0
Other Asian Countries	19.3	Reading, watching in-flight	73.1
Other	1.9	television/movies, listening	
Main purpose for this trip		to in-flight programs or tapes	
Business	44.1		
Business and leisure	11.2		
Leisure	40.6		
Visiting friends and relatives	3.5		
Other	.6		

Hours spent at departure airports and on airplanes were also recoded into categorical variables before chi-square analyses were performed. Hours at the airport were classified into three groups: one hour or less (32.6%), more than one hour and up to two hours (47.5%), and more than two hours (19.9%). Hours of the flight were recoded as: two hours or less (28.6%), more than two hours and up to four hours (27.9%), more than four hours and up to 12 hours (19.3%), and more than 12 hours (24.3%). As the number of hours in an airport increased, shopping, eating and drinking, and reading activities also logically increased; interestingly, the subsequent onboard eating and drinking and participation in reading and tuning in to entertainment programs increased as well. Similarly, as the number of flying hours increased, activities participated in onboard increased correspondingly and pre-boarding eating and drinking as well as reading also increased.

DISCUSSION AND IMPLICATIONS

The purpose of the project was to provide researchers and practitioners with a better understanding of the behaviors of international travelers in airports and during air travel. Generally speaking, waiting (inactive) and chatting (non-commercial activity) were the most popular ways to pass time while waiting for departure. Airports could do a better job of providing a variety of services to encourage more commercial activities. In North America and Asia, products and services in airports have traditionally been more expensive than similar items outside of airports. Even though some international airports have recently offered more competitive pricing, consumers' perception of expensiveness may still discourage them from purchasing products or consuming services. To increase revenue from this captive audience, airport shops should seriously consider offering products and services at "street prices" and communicate the pricing structure to travelers to boost the volume of business, which may increase their profits in the long run. In fact, most retail operations in the Hong Kong International Airport, which has been rated as the world's number one airport several years in a row, has offered merchandise at the same price level as those at other places in Hong Kong. A better job in communicating the pricing strategy to travelers who are not aware of this should be a priority for the airport management. While onboard, self-prepared and airline provided entertainment programs were the most often used to keep travelers engaged. Thus, the selection of onboard entertainment programs should be critically reviewed based on traveler characteristics and preferences.

Significant differences in behaviors were found among various demographic and trip characteristic groups. Older travelers were generally less active in both the departure airports and onboard, thus presented fewer commercial

opportunities for airports and airlines. Revenue generating activities for airports, such as shopping and eating and drinking, were more likely to be carried out by younger travelers. This finding had significant implications for airport management in merchant selection and restaurant/bar design. Younger than 60-year-old travelers were also more likely to use onboard entertainment services, which should have implications for video and audio program offerings. Reading in departure airports was more popular among the 30-59 year-old group. Airport bookstores and newsstands could take this information into account when selecting book and magazine stock.

Table 2
Activity Participation by Demographic Characteristics

Activity	Demographic Characteristic					Chi-Square	
	Gender						
	Male	Female					
Departure airport							
Working	19.9%	8.7			11.671**		
Waiting and chatting	50.0	62.3			9.873*		
Onboard							
Working	19.9	6.8			16.761***		
	Age						
	20-29	30-39	40-49	50-59	≥60		
Departure airport							
Working	11.6	20.5	18.6	13.0	4.1	24.002**	
Shopping	45.3	37.8	39.8	30.6	28.6	29.249*	
Waiting and chatting	55.8	49.6	50.4	60.2	69.4	34.137***	
Making phone calls	25.6	21.3	27.4	13.9	6.1	28.157***	
Eating and drinking	54.7	48.8	41.6	43.5	32.7	20.469**	
Reading	32.6	40.2	43.4	45.4	34.7	22.681*	
Onboard							
Working	10.5	19.7	16.8	13.0	4.1	23.261**	
Eating and drinking	67.4	52.8	61.1	69.4	57.1	25.805***	
Waiting, chatting, sleeping	69.8	62.2	66.4	69.4	61.2	18.663*	
Reading, TV, audio, tapes	75.6	76.4	74.3	74.1	55.1	18.705*	
	Nationality						
	N. Amer.	AU/ NZ	Europe	China	Taiwan	Other Asian	
Departure airport							
Eating and drinking	50.9	48.4	58.8	19.0	41.2	39.8	38.629***
Reading	51.4	38.7	32.4	32.8	49.0	25.8	36.084**
Onboard							
Working	22.0	6.5	13.2	6.9	13.7	6.5	26.791**
Eating and drinking	74.6	64.5	69.1	43.1	45.1	49.5	51.413***
Waiting, chatting, sleeping	74.6	74.2	69.1	69.0	64.7	45.2	41.359***

*p≤.05, **p≤.01, ***p≤.001

Another noteworthy finding was that Western travelers were more likely to eat and drink while waiting for departure and while onboard aircrafts. This result should be considered in in-flight menu design and airport restaurant selection. For example, airports that serve mostly Asian travelers may only need a limited number of food and beverage outlets, and Asian international airports should have restaurants and bars that cater to Western tastes.

Contrary to Geuens, Vantomme, and Grengman's (2004) statement that holiday or leisure travelers (as opposed to business travelers) are motivated for tourism and leisure activities (including shopping) at airports, this study found no differences between travelers of different trip purposes in their shopping behavior in the airports. However, frequent travelers were more likely to be business travelers and they showed significant behavioral differences in that they were most likely to work in departure areas and on airplanes. Thus, frequent traveler lounges' design should accommodate these travelers' need to work by providing adequate work space and a pleasant work environment (e.g., lighting and noise level). Airlines could try to assign a particular section of the aircraft for known business travelers (based on frequent travelers' information in the customer database) who would appreciate the compatibility among fellow passengers. Some airlines have implemented this by reserving several rows of seats at the front end of the economy class for frequent travelers.

Table 3
Activity Participation by Trip Characteristics

Activity	Trip Characteristic				Chi-Square
	Trip Purpose				
	Business	Bus/Leisure	Leisure	VFR	
Departure airport					
Working	26.8	13.0	3.1	5.9	54.294***
Waiting and chatting	45.5	46.3	68.9	47.1	32.889***
Making phone calls	27.7	25.9	10.2	29.4	25.490***
Onboard					
Working	26.3	7.4	3.6	11.8	48.390***
	Travel Companion				
	None	Relative/friends	Colleagues		
Departure airport					
Working	25.6	4.3	20.2		36.169***
Waiting and chatting	41.3	65.9	56.6		28.442***
Making phone calls	29.1	11.4	24.2		19.723***
Eating and drinking	41.9	54.0	33.3		15.855**
Reading	52.3	32.2	36.4		21.011**
Onboard					
Working	21.5	3.8	24.2		34.380***
Waiting, chatting, sleeping	55.2	71.6	72.7		17.241**
	Local/Regional Flights per Year (excluding this trip)				
	0	1-5	≥6		
Departure airport					
Working	14.0	11.2	21.3		13.872**
Waiting and chatting	52.4	64.5	47.5		15.200*
Eating and drinking	51.2	46.2	36.9		10.644*
Reading	36.0	39.1	46.1		13.414*
Onboard					
Working	8.5	13.6	21.3		17.999***
Eating and drinking	56.1	69.2	57.4		12.942*
Waiting, chatting, and sleeping	65.9	72.2	58.2		10.304*
	International Flights per Year (excluding this trip)				
	≤1	2-4	≥5		
Departure airport					
Working	12.7	12.7	20.0		10.095*
Onboard					
Working	7.8	17.3	20.0		18.492***
	Time at Departure Airport				
	≤1 hour	>1, ≤2 hours	>2 hours		
Departure airport					
Shopping	28.2	43.3	46.2		16.537*
Eating and drinking	30.9	50.7	68.1		32.918***
Reading	34.9	40.6	58.2		14.168**
Onboard					
Eating and drinking	51.0	68.7	78.0		20.815***
Reading, TV, audio, tapes	67.8	79.3	86.8		12.729**
	Time on Board				
	≤2 hours	>2, ≤4 hrs	>4, ≤12 hrs	>12 hours	
Departure airport					
Working	15.9	16.3	7.1	23.4	9.33*
Eating and drinking	39.7	36.6	60.0	59.8	20.787***
Reading	36.5	32.5	42.4	59.8	24.255***
Onboard					
Working	13.5	6.5	10.6	29.0	25.207***
Eating and drinking	55.6	52.0	76.5	79.4	28.463***
Waiting, chatting, and sleeping	66.7	58.5	78.5	80.4	15.398**
Reading, TV, audio, tapes	63.5	75.6	81.2	90.7	25.114***

*p≤.05, **p≤.01, ***p≤.001

While traveling with family and friends, respondents were most likely to eat and drink in the airports, followed by those traveling alone. Dining and drinking outlets in airports could be designed as family restaurants or young and fashionable theme restaurants/bars to target family and friends in groups. Small tables or counters should also be available to cater to the solo travelers.

As the waiting hours in departure airports increased, it is only natural that the proportion of respondents engaged in shopping, eating and drinking, and reading increased as well. For passengers boarding long flights, the chances for them to eat and drink in the airports also increased as they prepared for the long journey. Thus, food and beverage outlets should be important considerations for airports with a large number of long-haul flights. Since these are usually international flights, passenger mix should be investigated so that appropriate types of restaurants and menus could be offered.

Due to heightened security at airports across the global, more and more airlines and airports require travelers to arrive earlier than previously did. Even though this represents inconvenience to travelers, it created tremendous business opportunities and responsibility for airports. Airports have the responsibility to provide a comfortable and pleasant environment for travelers to relax and enjoy the first phase of travel after facing the chaos and additional procedures at check-in. Shops with attractive merchandise, well-designed and clean food and beverage outlets, and bookstores with interesting readings should be available as part of the pleasant environment to realize the newly created business opportunities.

LIMITATION AND FUTURE STUDIES

Findings of this study were exploratory in nature and no cause and effect relationships were identified. Before airports and airlines make any decisions on product and service design, more detailed investigation should be made. Findings from studies conducted at different airports could also be different due to the unique passenger mix and types/destinations of flight departing from the airports. Due to the convenience sample used, respondents may include more "inactive travelers" who were waiting for boarding at the departure lounge. Those active travelers who were shopping, eating, or conducting other activities at the airport did not have the opportunity to be interviewed. However, this study provided some basic information of air traveler behaviors that could be used as a base for further studies.

Airport policymakers no longer consider the transportation of passengers between one destination and another as the sole purpose of an airport. They believe that an airport can be a leisure attraction and primary destination in its own right (Freathy & O'Connell, 1999). Thus, destination planning and development concepts should be applied to airport design and management. Prior to any planning, focused and well-conducted research is a must, with consumer behavior research as an important component. Each of the activity categories used in this study could be further broken down into more specific tasks. For example, shopping could be divided into purchases of different types of products (e.g., local souvenirs, duty free products, brand name clothing) so that the right merchant mix could be derived. Food and beverage product and service preferences could also be further investigated to best serve the travelers and maximize both the airport and outlet operators' revenues.

Even though American airlines are facing tremendous financial performance pressure, airlines in other parts of the world, Asian airlines in particular, are performing better than ever with increasing passenger loads and revenue. To continue such success and provide value to passengers, amenity offerings could be further enhanced based on traveler behaviors and preferences. For example, in-flight entertainment selection could be evaluated to cater to the preferences of various groups of travelers, especially on long-haul flights. Eating and drinking patterns, such as timing of meal service, menu preferences, expectations of food and beverage in-flight service, could also be further studied. As American airlines cut back on in-flight meal service, Asian airlines still serve hot meals on flights even as short as two hours. Do passengers expect meal service on short flights? Can passengers be "educated" to accept and appreciate less meal service? How can food and beverage service or entertainment programs affect passengers' perception on value of service? All these questions are awaiting to be answered by future research.

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APPLICABILITY OF DIFFERENT EMOTIONAL CONSTRUCTS IN THE HOSPITALITY INDUSTRY

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ABSTRACT

This paper investigates the area of emotional value by using the critical incident study method. The main purpose of this study is to identify the critical incidents that lead to different emotional responses in a hotel setting. The specific objectives are to (a) identify emotions that customers experience during their hotel stays and (b) identify critical incidents that lead to these emotional experiences. This information can then be given to hospitality executives so strategies and tactics can be developed to (a) prevent incidents that cause negative emotions and (b) “stage” incidents to develop positive emotions.

Key Words: emotions, critical incident study, and customer loyalty

INTRODUCTION

Emotion plays a central role in the customer–employee relationship. The hospitality industry provides services (e.g., valet parking, turndown service) as well as physical products (e.g., food in a restaurant, shampoo in a hotel room). Emotion may occur before, during, or after service delivery. Since customers interact with employees in many ways in the hospitality industry (in a restaurant with a waiter, at the check-in with a front desk agent), emotion may play a decisive role. Emotion takes on monetary worth because customers’ emotional displays and mood states often influence their future behavioral intentions such as return intent. Positive emotions (e.g., being happy, excited, content) add extra value and are essential to building strong relationships between customer and brand or firm. On the other hand, negative emotions (e.g., being angry, disgusted, fearful) lead to customer complaints, or simply not returning to the property (Fox, 2001).

Although the importance of emotions has been studied in loyalty research, customer satisfaction studies, advertising studies, and so on, the driver of customer emotion has not been explored. In the hospitality industry, customers have to spend a certain amount of time on a property (e.g., staying at a hotel and waiting for food in a restaurant) and interact with employees during their stays. Customers may experience negative, positive, or both types of feelings, and those feelings may affect their decision when they choose their next stay. Some emotions will endure for a long time, and some will not.

The Primary goal of this research is to answer the following question: “In a hotel setting, which emotions have customers experienced during their stays? And what incidents made customers experience this emotion?”

The main objectives of this research are the following:

- To identify emotions that customers experience more frequently or less frequently during their hotel stays;
- To identify critical incidents that provide emotional experiences to customers; and
- To provide an idea about what management needs to do to create strong positive emotions while at the same time minimizing actions that cause negative emotions.

The purpose of this study is to identify critical incidents that cause customers’ different emotions. The information obtained as a result of this study will benefit the hotel industry. By knowing which incidents cause customers to have positive emotions, hotels will be able to provide better services and will try to prevent incidents that create negative emotions in customers.

LITERATURE REVIEW

Emotion has been discovered to be an important component of customer loyalty (Baloglu, 2002; Barsky & Nash, 2002; Shoemaker & Lewis, 1999) as well as an effective marketing tool (Edwardson, 1998; Holbrook & Westwood, 1985;

Phillips & Baumgartner, 2002; Westbrook & Oliver, 1991). In many studies, emotion was mentioned as playing an important role in customer satisfaction as well (Mattila & Enz, 2002; Oliver, 1997).

Basic Emotions

In psychology studies, researchers have studied human emotions for a long time. There has been an argument about whether or not basic emotions (also called primary or fundamental emotions) exist. Some researchers believe in basic emotions (Ekman, Friesen, & Ellsworth, 1982; Izard, 1977; Plutchik, 1980; Tomkins, 1984), whereas others do not (Ortony & Turner, 1990).

Emotions in Customer Satisfaction

The question of whether or not satisfaction is an emotion has not been answered. Oliver (1997) argued that satisfaction was more of a complex cognition-emotion. There should be instances in which the satisfaction process is more cognitive and other instances in which it is more affective. Nevertheless, many researchers agree that emotions affect customer satisfaction.

Nyer's (1997) study found that post-consumption responses as repurchase intentions, word-of-mouth intentions, and other reactions are predicted best by using measures of satisfaction plus measures of other emotions. In a health care study, it was shown that positive feelings have the expected effect (satisfaction), but negative feelings do not always result in dissatisfaction (Dubé & Belanger, 1996). Other studies investigated the role of specific emotions in customer satisfaction related to service delay (Folkes, et al., 1987; Taylor, 1994). A common result from the studies is that positive emotion affects customer satisfaction positively and negative emotion affects negatively. In specific, Westbrook and Oliver's (1991) study provided a revealing analysis of satisfaction as correlated with more complex affective experiences in automobile ownership. Their findings show three suggested emotional dimensions basic to the satisfaction response. These dimensions are hostility (generalized negative affect), pleasant surprise (positive affect), and interest (positive affect), all of which correlated with satisfaction.

Emotions in Customer Loyalty

In the study of the relationship between emotion and satisfaction and between satisfaction and loyalty, Bloemer and Ruyter (1999) examined the effect of satisfaction and positive emotions in many service settings that differ in level of involvement, and the research results show that the relationship between satisfaction and loyalty with respect to extended services was moderated by positive emotions in the case of high involvement service settings.

Griffin (1995) and Baloglu (2002) have shown that there are two critical factors related to loyalty: an emotional attachment and repeat purchase. Baloglu's (2002) study assessed the two key dimensions of loyalty as consisting of behavioral variables and an attitudinal variable. Behavioral variables in this study include hours spent in the casino, proportion of visits, and weekly visits to a casino to which players feel loyal. The attitudinal variable, on the other hand, is emotional commitment to trust. His study stresses that it is key that managers understand the difference between attitudinal loyalty and behavioral loyalty if they are to distinguish those loyal to the brand and those who may be loyal to the rewards.

In research to measure how emotions affect customer satisfaction and loyalty in the hotel industry, Barsky and Nash's (2002) study examined sixteen emotions: comfortable, content, elegant, entertained, excited, extravagant, hip or cool, important, inspired, pampered, practical, relaxed, respected, secure, sophisticated, and welcomed, the so-called Market Metrix Hotel Emotions Scale. Respondents were asked to answer which emotions are more important than others when they choose a hotel. Among 16 emotions, three top-ranked emotions in each segment are called *loyalty emotions*. The results show that evoking the loyalty emotions significantly strengthens customers' intent to return to a hotel and their willingness to recommend a hotel brand to others. Guests who had reported experiencing the loyalty emotions seemed to be less price-sensitive than those who had not experienced those key emotions in connection with their hotel stays.

Shoemaker and Lewis's (1999) study proposes the loyalty triangle, which consists of three components: the process, value, and database/communication. Among those, the value creation consists of two parts: value added and value recovery. Value added includes benefits that firms offer to repeat customers. Value-recovery is needed when a firm makes a mistake. The firms must resolve the problem in order to decrease the cost associated with service failure. Specifically for the value-added, six types of value have been proposed: financial (discounts); temporal (express check-in/out); functional (check cashing, Internet available); experiential (upgrades); *emotional* (recognizing customers, providing pleasant experiences/services); and social value (interpersonal link with a service provider). Among those, emotion plays an important role in value creation, which perhaps leads to customer loyalty. Emotion may occur in all three components, process, value, and communication. The critical part is that anytime a customer wants to exit in the circle, he/she can. Emotion may keep the customer in the circle, or make him/her exit from it.

Emotional Words

Some researchers have proposed basic emotions (Izard, 1971; Plutchik, 1980); some researchers have studied the importance of emotion in marketing (Mano & Oliver, 1993; Mattila & Enz, 2002; Phillips & Baumgartner, 2002; Westbrook & Oliver, 1991); and some researchers have measured emotions (Barsky & Nash, 2002; Edwardson, 1998; Richins, 1997).

In summary, emotional words that have been mentioned or measured are listed. These are not all the research about emotional words, but what this study found important. Among the studies reviewed, most mentioned emotional words are; angry, bored, content, depressed, disgusted, distressed, excited, guilty, happy, interested, sad, secure, and surprised. From the hospitality studies, relaxed and welcomed are selected additionally. These fifteen emotional words are chosen to be tested in this study. The next part discusses how the emotional words are tested, focusing on the methodology and research process.

METHODOLOGY

The methodological strategy of this study was grounded in the critical incident technique (CIT). The CIT obtains stories, in this study, critical incidents, from customers or employees about, for example, satisfying and unsatisfying service encounters they have experienced (Zeithaml & Bitner, 1996). The main research instrument in this study was intercept interviews with customers in a hotel.

Population and Sampling

The population for this research was hotel customers. However, segmentation was utilized. In this research, the luxury hotel segment (four or five-star) rated by Mobil was selected to access the sample population.

The Venetian Resort in Las Vegas approved the intercept interview at its property; the sample was collected on the Venetian Resort property alone. Because the study used the sample in the area, it is fair to say that the convenience sampling method was chosen.

Interview Protocol and Questionnaire Design

The questionnaire was designed to facilitate participants to answer the following open-ended question: "What emotions, out of 15 emotional words given (*angry, bored, content, depressed, disgusted, distressed, excited, guilty, happy/joyous, interested, relaxed, sad/sorrow, secure, surprised, and welcomed*), have you experienced during your hotel stays? And what incidents made you experience the emotion?" Fifteen emotional words were chosen from the literature review. As the last part of interview, a short survey was added to collect participants' information. It included demographic information, such as gender and age, frequency of visitation to the hotel, and the purpose of the trip.

Because it is unrealistic for customers to accurately recall 15 emotions, an incomplete block design was used in this research. The incomplete block design assures that responses can be collected (Shoemaker, 1996). The incomplete block design allows customers to recall a subset of emotions while ensuring that each of the 15 emotions is recalled an equal number of times. Each participant was asked five different emotions that were randomly selected by the design. For emotions that respondents answered as *experienced*, specific incidents that brought about that emotion were requested.

Data Collection and Data Analysis

The interviews were conducted at the Venetian Resort in Las Vegas from April 1st through April 5th, 2004. Requirements for participants were that he or she had to be staying or had to have stayed at the Venetian Resort, and that he or she had to spend at least one night on the property. Each interview took 5 to 10 minutes, depending on the length of the responses. Rather than writing down responses, the interviews are tape-recorded to save time for both subjects and interviewers. Along with the interview, all respondents were asked to complete a short survey. It took an additional a few minutes. As a result, 294 interviews were completed.

In order to analyze the data gathered from the 294 interviews, the content analysis method was chosen. The second part of the survey, including participants' demographic information, frequency of visitation to luxury hotels and Las Vegas, and purpose of the trip, was coded into the Statistical Package for the Social Sciences (SPSS) using descriptive statistics.

RESULTS AND IMPLICATIONS

Demographics of the Participants

A total of 296 people participated in the interview process, and all the conversations were recorded. Among the

participants, two thirds (67.3%, $n = 198$) of the respondents were male, versus 32.7 % ($n = 96$) female. With regard to the age distribution, participants in the age category of 30 to 59 years represent approximately three fourths (74.2%, $n = 218$) of the sample, and the mean age was 44.02. There was not much difference in the purpose of trip, which showed 43.9% for pleasure, 33.3% for business, and 22.8% for both.

Critical Incidents by Emotions and Service Components

Critical Incidents by Emotions. A Total of 695 people (out of 1,470: 98 questions x 15 emotions) answered that they experienced the emotions. Tape-recorded interviews were written and sorted by similar categories. Table 1 provides the summary of results. The emotion that was most experienced by customers was secure (88%), and emotions that were least experienced by customers were guilty and sad (8.2% each).

Table 1
Frequency of Emotional Incidents that Customers Experience

Emotion	Frequency(experienced)	Most mentioned incident
Positive		
Content	83/98	Room (gorgeous, luxurious, outstanding)
Excited	62/98	Physical appearance of the hotel (beautiful art, size of the hotel, décor)
Happy	76/98	Room (bathroom, shower, spaciousness)
Interested	66/98	Different aspects of the hotel (many things to do)
Relaxed	71/ 98	Room (spaciousness, quiet)
Secure	86/98	Security check at the elevator
Welcomed	79/98	Staff (friendly, helpful, pleasant, warm, polite)
Total	523/686 (76.2%)	
Negative		
Angry	29/98	Poor customer service (cold food, not taking care of customer needs)
Bored	18/98	There is nothing to do (no activities, amenities in the hotel, bad weather)
Depressed	13/ 98	Poor service
Disgusted	25/ 98	Bad room condition (dirty, stains)
Distressed	14/ 98	Poor customer service (treated poorly)
Guilty	8/ 98	Spending so much money in the hotel
Sad	8/ 98	I'm not with my family
Total	115/ 686 16.8%)	
Surprised	57 / 98 (58.2%)	How nice the hotel is (quality of the hotel)

Critical Incidents by Service Components. The concept applied in this study to classify incidents is Oliver's (1993) four components of a service: physical product, service product, service environment, and service delivery.

The physical product is the tangible components of the service. The service product consists of the core services purchased by the customers. It involves interactions with employees. The third component of service is the service environment. It is also called *servicescape*. Three distinct elements comprise the service environment: the ambient conditions (lighting and background music), the spatial layout (creating a feeling of excitement), and the signs and symbols (Bitner, 1992). The fourth component of service is service delivery. It is what happens when a customer actually purchases the service. A guest may end up with smoking with two double size beds, instead of the nonsmoking room and king size bed he or she reserved. Figure 1 shows how the critical incidents are sorted.

Positive Emotions. Positive descriptions of emotions in this study include content, excited, happy, interested, relaxed, secure, and welcomed. Positive emotions were experienced by respondents much more than negative emotions (76.2% versus 16.8%). The sample was taken in a luxury segment hotel, and the hotel was supposed to have better amenities and provide better service than economy or mid-price hotels do.

Incidents related to positive emotions were divided into the four components of service. Each emotion has different incidents, but sometimes the same incident made customers feel multiple emotions. For example, a spacious room might make a customer feel happy and at the same time content and relaxed.

Tables 2 summarize incidents obtained from the interviews that resulted in positive emotions. In addition, incidents that had nothing to do with the hotel (e.g., weather related, personal reason—honeymoon) are also found.

Because there was an enormous amount of information gathered from the interviews, a part of the critical incidents in a few emotions are listed in the Table 2.

Figure 1
Incident Sorting Process

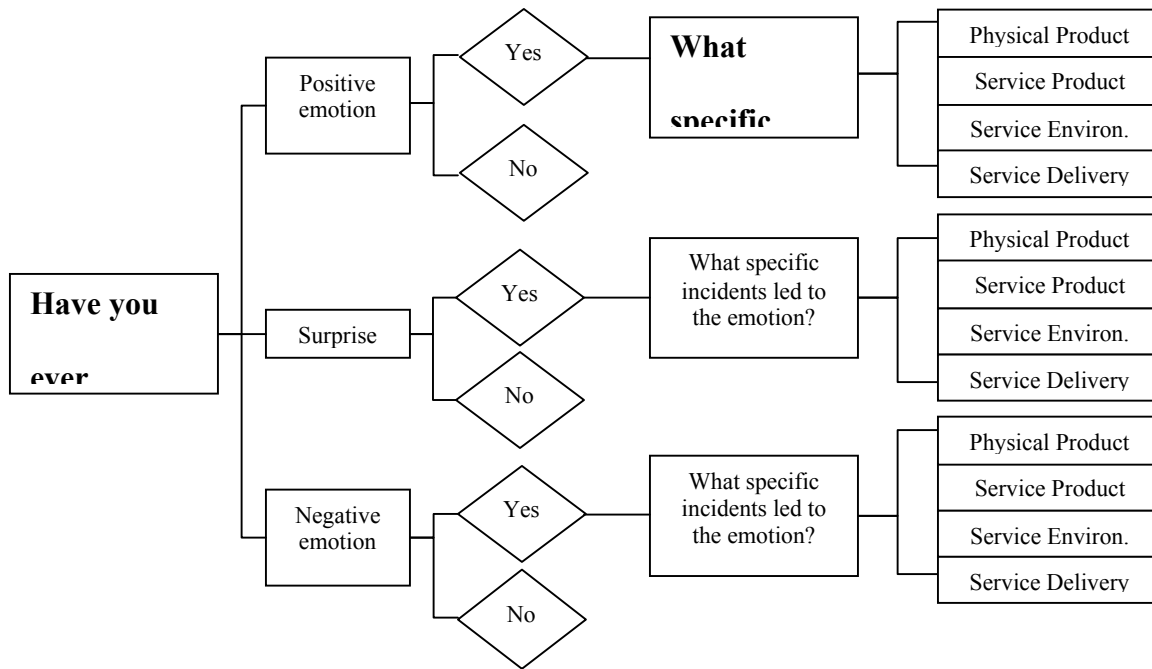


Table 2
Positive Emotional Incidents from Four Components of Service and Others

Components of service	Incidents
Physical Product	
Content	Room Size; Bed; Bathroom; 3 TVs & 2 Bathrooms; Bathtub, Fax machine Architecture and décor (physical appearance); Water theme and gondola
Excited	Physical appearance of the hotel-Size of the hotel; luxurious décor.
Secure	Door locks itself, Video cameras The size of the hotel
Service Environment	
Content	Room - Quiet; Beauty; "The room was nice and quiet (away from noisy gambling floor)"; General atmosphere of the hotel (friendly)
Excited	Lights; Luxurious room; Atmosphere Many people around; Different kinds of people; Beautiful women
Secure	Overall/general feeling Staff/employees seem to be happier
Service Product	
Content	Friendly helpful responsive staff (housekeeping, check in, bell desk), smooth check-in procedure
Excited	Hotel facilities; Restaurants; Spa; Pool; Museum; Shows, etc
Secure	Security check at the elevator General Security (security check at different locations)
Service Delivery	
Content	Quality of customer service (get things done, friendly) Consistency (the service was what I expected, service and room)
Excited	We were treated wonderfully (special customer service)
Secure	Anything you need, you can call someone and they will bring it to you

Negative Emotions. Descriptions of negative emotions include angry, bored, depressed, disgusted, distressed,

guilty, and sad. As mentioned before, respondents experience negative emotions less than they experienced positive emotions. The sample was taken in a luxury segment hotel, and the hotel was supposed to provide high quality services and environment. That may be one of the reasons why not many respondents experienced negative emotions during their stays. Table 3 summarizes the incidents that made respondents have negative feelings.

Table 3
Negative Emotional Incidents from Four Components of Service and Others

Components of service	Incidents
Physical Product	
Angry	Room Condition (stain on the bed, broken things in the room)
Bored	There is nothing to do (no amenities in the hotel), bad weather, location of the hotel)
Service Environment	
Guilty	Spending so much money on the stay The fake Italy theme – “It is not real, but fake, and hotel made fake things”
Sad	Watching people – “Watching other people—drunken people” “Seeing people losing a lot of money”
Service Product	
Angry	Unfriendly staff, Not smooth check-in procedure
Disgusted	Rude staff, Not organized check-in procedure
Service Delivery	
Angry	Reservation messed-up
Depressed	Poor service – “Housekeeping didn’t do their job properly (didn’t empty trash bucket),” “There were broken things, not been fixed”
Sad	Disappointing service—picked up wrong dry cleaning, I asked for privacy, but they woke me up
Others: Personal	Depressed, Sad, & Guilty--I’m not with my family Bored--There is nothing to do (bad weather)

Among the answers, poor service and unfriendly staff were at the top on the list, which means that respondents experience negative emotions when they do not get what they are supposed to get (reservation messed up) and also when the attitude of hotel staff was rude. If the hotel did not deliver what it should deliver (e.g., housekeeping did not empty trash buckets), respondents felt negatively (angry, depressed, distressed).

Emotion: Surprise. When the study began, the emotion of surprise was expected to have a positive meaning. However, in the process of interviews, it was found that the emotion “surprised” could have either positive or negative meanings, or neither. The emotion of surprise was unique and had to be separated from other emotions. The result showed incidents that made respondents feel surprised either positively or negatively, but sometimes it was just not explainable (neither positive nor negative, e.g., “I was surprised to see how busy the hotel is, but how not busy the casino is”).

The results show that positive emotions are related to all four components of service: physical product, service product, service environment, and service delivery pretty much equally. Especially spacious rooms, helpful friendly staff, the physical appearance of the hotel, and outstanding customer service were mentioned frequently. However, negative emotional experience came from mostly service delivery. Failure of service delivery (e.g., reservation messed up, bellman didn’t show up at check out) definitely causes customers negative emotions.

IMPLICATIONS

The results of this study have important implications not only for researchers but also for hotel management. This study provides a framework for understanding the drivers (incidents) of emotions that customers experience during their hotel stays. Using the findings, it would be possible to discover if there is relationship among emotions, satisfaction, and loyalty.

As the concept of emotion in marketing is spreading through industries, it is important that hotels provide positive emotional experiences to customers. The information obtained in this study benefits the hotel industry in that they can offer

and design services that maximize customers' positive emotional experiences and at the same time minimize negative emotional experiences.

The findings from the incidents that create customers' negative emotions are also important to the hotel industry. Failure of service delivery was one of the main reasons why customers experienced negative emotions. Efforts to recover the failure have to be implemented in order to increase customer satisfaction.

Understanding these incidents would be extremely critical because the customers' previous experiences lead to their next purchase decision. If management fully understands the relationship between critical incidents and customers' emotions, management can influence customers' emotions.

LIMITATIONS

The first limitation is that the sample was selected only from the Venetian Resort. Obviously, luxury hotel customers stay at other hotels when traveling. Therefore, the sample is not representative of all luxury hotel customers. The second limitation is that there was no attempt made to count the non-response rate or to contact non-respondents. Clearly, it is important to understand how and if non-respondents differ from respondents in their emotional experiences. One last thing that has to be mentioned is that the city (Las Vegas) itself may create some emotions automatically. Its unique environment (e.g., gamble, shows, and gorgeous hotels and restaurants) may lead to customers' emotions, such as excited, interested, and surprised.

RECOMMENDATION FOR FUTURE RESEARCH

Based on the findings of this research, the following research possibilities are suggested. First, future research should include other emotions that were not tested, but might be important in this study. Also it should include other segments (economy, mid-price, and upscale) of hotel customers, but still segment separation is recommended. In addition, this study may be able to extend to other industries, such as restaurants, airlines, and casinos. Second, future research should explore which incidents are more or less critical for developing positive or negative emotions. As a result, management can develop tactics and strategies based on the importance of critical incidents. Finally, future research should explore the relationship between the incidents and emotions, emotions and satisfaction, and emotions and loyalty as well. This study will provide a foundation to explore the relationships. One might want to examine critical incidents and emotions that affect most or least when customers decide to return to the property. This study will help management to develop marketing strategies and tactics that satisfy customers' emotional needs and wants, which may lead to customer loyalty.

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REVISIT TO THE DETERMINANTS OF CAPITAL STRUCTURE: A COMPARISON BETWEEN LODGING FIRMS
AND SOFTWARE FIRMS

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ABSTRACT

This study validates the contradiction between capital structure theories and previous empirical studies, and further identifies lodging firms' unique leverage behavior through a comparison to software firms. The findings indicate that fixed-assets, growth opportunities, and the joint effect of these two variables are the significant long-term debt determinants of the lodging industry. The analysis of the joint effect also suggests that fixed-assets and growth opportunities affect each other's relationship with long-term debt usage. With the findings on lodging firms' unique financing rationale, authors hope to provide useful information for corporate financial planners and lending institutions regarding debt-financing behavior.

Key Words: Capital structure; long-term debt; debt determinants; lodging firms

INTRODUCTION

Conventional capital structure theories (Myers, 1977; Jensen, 1986) suggest that firms' optimal capital structure is related to costs and benefits associated with debt and equity financing. With the optimal debt to equity mix, firms could achieve the lowest financing costs and consequently increase the value of shareholders (Sheel, 1994). Although the optimal mix varies from industries to industries (Kim, 1997) and countries to countries (Wald, 1999), previous researches have constantly found capital structure theories applicable to explaining financing decisions. However, Dalbor and Upneja's (2004) study on lodging firms claimed a positive relationship between growth opportunities and long-term debt leverage, which indicates that lodging firms may have partly different leverage behavior from what the theories suggest. To fully understand lodging firms' leverage behavior, it is important to validate the theoretically unexpected result and to note why the behavior happens. Thus, this study aimed at validating the findings that are not consistent with the theories and re-examining lodging firms' leverage behavior in comparison to another industry with contrasting financial characteristics: the software industry. The comparison between two industries with distinct financial and operational differences would enable us to easily identify the unique leverage determinants of each industry. With the understanding of the unique determinants, this study is expected to clearly explain the lodging-specific leverage behavior.

This study is set apart from previous studies in that it investigates the joint effects of the leverage determinants. Despite the fact that traditional theory-based determinants have been examined by previous studies, little efforts have been made to examine the joint influences of the determinants. As these determinants simultaneously exist in the real world situation, a model including the interaction terms could be more effective to observe the practical relationships between long-term debt and its determinants. Therefore, the objectives of this study were 1) to revisit the determinants of capital structure of lodging firms to investigate the validity of Dalbor and Upneja's (2004) finding about growth opportunities, and 2) to further identify uniqueness in leverage behavior through a comparison to the software firms. This study also sought to explore the joint effects of key financial leverage determinants.

HYPOTHESES

The hypotheses of this study were based on the assumption that conventional capital structure theories can be applied to both lodging and software firms. Therefore, each variable was expected to have the same sign in both industries and to agree with the capital structure theories. However, the degree of influence on debt behavior from each leverage determinant was expected to differ between the two industries, because the optimal debt-equity mixes may vary in different industries (Kim, 1997). In order to easily contrast the difference between two industries, this study employed an industry dummy variable as utilized by Sheel (1994). Null hypothesis that determinants influence both industries to the same degree

was proposed in this study. Thus, the positive significance of the estimate would support the assumption that lodging and software firms respond to each determinant in the same direction but to a different extent.

Properties, plants and equipments (PPE) usually serves as inflation-resistant collateral for loans. Consequently, interest rates for lodging firms should be relatively low (Arbel, 1990) and hotels would increase long-term debt usage as predicted by Jensen and Meckling (1976). Therefore, PPE is hypothesized to be positively related to long-term debt level. The hypothesis of growth opportunity (GW) is based on the agency cost theory. Jensen and Meckling (1976) argue that firms with high growth opportunities are more likely to have high direct and indirect debt costs. As a result, firms with valuable growth opportunities would maintain low debt ratio in order to minimize the constraints enforced by creditors and to maximize the potential gain. Therefore, growth opportunity is hypothesized to be negatively related to long-term debt level. The market-to-book ratio was chosen as the proxy for growth opportunity because it presents the current expectation of the company's future growth opportunities to the book value. Compared to the software firms, lodging firms not only have substantially higher PPE but also rely on fixed assets for future growth. Therefore, the interaction term of PPE and growth opportunities was explored in this study to investigate this unique PPE-reliance growth scenario of lodging firms. Since fixed-assets, as collateral to the debt, will allow lodging firms to have lower interest rates from the lenders, even when the growth opportunities can increase the debt cost, the interaction variable was hypothesized to have a positive sign in both industries.

Higher earnings volatility (VOL) means greater uncertainty in business, which signifies higher risk to creditors. The creditors, therefore, would ask a higher compensation for undertaking extra risk. Thus, negative relationship between earnings volatility and long-term debt level was hypothesized in both industries. Firm size (SIZE) is hypothesized to be positively related to long-term debt level. Barclay and Smith (1995) pointed out that large firms, compared to small firms, are able to carry a higher level of long-term debt because they can afford the high fixed costs of long-term debt. As for agency cost, Jensen (1986) indicates that conflicts of interest between managers and shareholders over payout policies are especially severe when firms generate substantial free cash flow. In such cases, shareholders would be motivated to turn banks or lending institutions into their vehicles for monitoring and curbing management spending by undertaking more debt. Thus, free cash flow (FCF) as a proxy for management agency cost was hypothesized to have a positive sign in both industries. The hypothesis for profitability (PROF) is based on the pecking order theory; profitable firms would prefer using their internal funds (e.g., retained earnings) to external debt to finance the growth. Subsequently, profitable firms would have lower debt ratio than unprofitable firms. Therefore, profitability is hypothesized to have negative signs in both industries.

METHODOLOGY

For both lodging and software firms, the quarterly financial information from 1997 to 2003 was retrieved from the COMPUSTAT database. After deleting outliers, 610 observations from the lodging firms and 491 observations from the software firms were retained for analysis. As explained earlier, the software industry was chosen for comparison purpose due to its contrasting characteristics to the lodging industry.

Two models were introduced to examine the relationships between long-term debt and its determinants. The first model was a straightforward Ordinary Least Squares (OLS) regression on lodging firm's data as shown in equation (1). The long-term debt ratio was the dependent variable and the selected determinants from the literature review were employed as the independent variables. The second regression model incorporates an industry dummy variable to compare the lodging firms to the software firms as presented in equation (2).

$$LTD = A + B_i * X_i + E \quad (1)$$

$$LTD = A + (A_L - A_S) * D + B_{Si} * X_i + (B_L - B_S)_i * D * X_i + E \quad (2)$$

X_i = the long-term debt determinant i (including PPE*GW)

A = the intercept of the regression line on Y-axis

B_i = the slope of determinant i

E = the error term

$(A_L - A_S)$ = the intercept difference between lodging and software firms

D = the industry dummy with a value 1 for lodging firms and 0 for software firms

B_{Si} = slope of the software for determinant i

$(B_L - B_S)_i$ = the slope difference between lodging and software firms for determinant i

The equality of error variances is required to use the pooled model. However, the error variances of two sub-sample sets may be different due to the different financial characteristics of the two industries. Thus, the Goldfeld-Quandt (GQ) test was conducted to detect heteroskedasticity (Griffiths et al., 1993). The result indicated that the computed GQ of 1.925 exceeded the corresponding critical F value of 1.153 at the alpha level of 0.05. It was concluded that there was a significant difference in error variances between lodging and software firms. Therefore, instead of OLS regression, the Generalized Least Squares (GLS) regression procedure was applied to equation (2).

In order to apply the GLS regression procedure, the dependent variables was transformed, so that the error variances of two sub-samples would be the same. The dependent variable of each sub-sample set was divided by its own standard deviation of error terms, so that the error variances could be the same and equal to 1. The transformed dependent variable yield a GQ of 1.083, which was smaller than the critical value of 1.153. Therefore, the pooled data could be accepted as homoskedastic.

The descriptive statistics of the data shows that lodging and software firms had contrasting financial characteristics. To further test whether the two industries exhibit statistically different behavior in long-term debt, a Chow test was performed. The result indicated that, using model (1), the computed F statistic was 52.88, which clearly exceeded the critical F value of 2.01 at 5 percent level. Thus, it could be determined that lodging and software firms were statistically different in financial leverage behavior from all the determinants' perspectives. Therefore, the need for further detailed comparison of the two industries was justified. Furthermore, prior to the regression analysis for both models (equation (1) and (2)), all the independent variables were standardized with Z-scores to avoid unequal weights laid on the variables due to different measurement units.

RESULTS

Although both models were significant, the explanatory power of the first regression model was not satisfactorily high: adjusted R-square of 0.208, which signified that the independent variables might be of limited value in predicting the exact long-term debt level of lodging firms. However, since the model was designed to explore long-term debt's relationships to its determinants, not to predict long-term debt level, the low adjusted R-square should not be a critical issue in this study. Multicollinearity tests were also conducted with VIF (Variance Inflation Factors), which were well below the problematic level of 10 (Kennedy, 1998).

The positive sign of PPE in lodging firms was consistent with Jensen and Meckling's (1976) agency cost theory that fixed-assets serve as collateral that can reduce the debt cost. In Table 2, the PPE of hotel firms shows stronger positive relationship to long-term debt than that of software firms, which reinforces Sheel's (1994) positive but insignificant finding. These two findings suggest that the high level of PPE not only increase long-term debt level in individual lodging firms but also have greater influence on lodging firms' leverage behavior than on software firms'. On the contrary, fixed-assets appeared to have a negative impact on the leverage of software firms. The possible explanation is that the investment on fixed-assets, instead of research and development (R&D), could be deemed by creditors as irrelevant or obstructive to the core business and increasing the risk of the long-term debt.

As opposed to the hypothesis, the positive relationship between long-term debt and growth opportunity, which agrees with the results of Dalbor and Upneja (2004) and Wald (1990), were exhibited in both lodging and software firms. This result might originate from lodging firms' low debt costs due to their fixed-asset collaterals. Therefore, lodging firms could use long-term debt to finance the growth opportunities. The positive relationship was also observed in software firms. This suggests that lenders may have shared the same optimistic viewpoint as the equity market did regarding software firms' growth opportunities and are still willing to loan to software firms. Nevertheless, lenders would still charge higher prices for the non-collateralized loans, which explain the fact that software firms' long-term debt increases as their growth opportunities increase but at a lower rate than that of lodging firms. The results suggest that the positive relationship could exist in industries with high growth opportunity, such as the software industry. Therefore, the application of the agency cost theory needs to be modified in the cases of companies with either high fixed-asset level or large growth opportunities.

The interaction term of fixed assets and growth opportunities (PPE*GW) was positive and significant in lodging firms. Therefore, the sensitivity of long-term debt level to growth opportunities is affected by the level of PPE. The parameter coefficient of debt leverage based on GW might be lower for lodging firms with low PPE and higher for firms with higher PPE. Table 2 shows that the difference between lodging firms and software firms regarding the interaction variable (PPE*GW) was positively significant, which suggests that not only main effects of PPE and GW but also the joint effect of the two variables effect lodging firms' long-term debt level.

Earnings volatility (VOL), firm size (SIZE), and profitability (PROF) are all not significant in lodging firms. However, the sign of VOL of software firms in the second regression model was positive as opposed to the hypothesis. Kim and Sorensen (1986) found the same relationship in companies whose top managers were the largest shareholders. They argued that high insider-ownership could effectively lower the debt cost despite earnings volatility. Therefore, companies of high insider-ownership are able to transfer the financial risk caused by earnings volatility from shareholders to lenders by using more debt, which consequently produce a positive correlation of the earnings volatility and long-term debt. As for SIZE variable, Kim and Sorensen (1986) also failed to find a significant correlation between firm size and long-term debt. This finding indicates that firm size did not function as a significant determinant for long-term financial leverage behavior in lodging firms. Contrary to lodging firms, software firms' profitability is statistically significant and negatively related to long-term debt level as hypothesized. The lodging and software industries also showed the statistical difference in the relationship of profitability to long-term debt.

Table 1
Regression results of model 1 on lodging firms

Independent Variables	Beta	Std. Error	t
Intercept	.550	.130	4.233**
PPE	.063	.011	5.827**
GW	.074	.022	3.292**
PPE*GW	.140	.018	7.684**
VOL	-.036	.023	-1.569
SIZE	.026	.025	1.035
FCF	.015	.016	.944
PROF	.014	.010	1.427
Adjusted R ²	.208		
F	17.641**		

Note: ** p < .01

Although the agency cost variable (FCF) was found to be not significant in the lodging firm model (Table 1), the positive sign presents a consistency with the agency cost theory as discussed earlier. It is also worthwhile to note that lodging firms' negative free cash flows implies that there is lack of free cash flow related agency cost. Therefore, it is reasonable that no significant relationship between FCF and long-term debt could be found. On the contrary, Table 2 shows that FCF had a negative sign in the software industry. One reasonable explanation may be that many top managers of software firms are major stockholders, who would try to reduce the management agency cost. Therefore, higher FCF in software firms with growth opportunities would encourage managers, as owners of the company, to reduce debt leverage in order to avoid the commitment of free cash flow to debt payment.

Overall, only a few of the long-term debt determinants tested in this study (PPE, GW, and PPE*GW) were found statistically significant in lodging firms, whereas all the determinants, except for the interaction term of PPE and GW, were significant in software firms. As expected, the contrasting differences in financial characteristics between the two groups of firm make the two industries' financial leverage behavior drastically different, as presented in table 2.

Table 2
Regression results of model 2 (GLS) on the pooled data

Variable	Beta	Std. Error	t	Variable	Beta	Std. Error	t
Intercept	.233	.035	6.729**	DUMMY	1.759	.053	33.397**
PPE	-.136	.042	-3.221**	PPE D	.387	.058	6.647**
GW	.159	.046	3.436**	GW D	.235	.097	2.433*
PPE*GW	-.024	.034	-.708	PPE*GW D	.458	.073	6.251**
VOL	.153	.048	3.194**	VOL D	-.396	.091	-4.369**
SIZE	.921	.157	5.881**	SIZE D	-.728	.180	-4.035**
FCF	-1.075	.161	-6.660**	FCF D	1.179	.168	7.026**
PROF	-.172	.034	-5.047**	PROF D	.256	.051	5.021**
Adjusted R ²		.530					
F		83.569**					

Note: 1. Dummy 1 = lodging firms, 0 = software firms; 2. * P < .05, ** P < .01

CONCLUSION

The results of the study indicate that besides the main effects of fixed-assets and growth opportunities, the interaction effect of the two variables are important when studying lodging firms. In other words, when the agency cost theory is applied to explain lodging firms' leverage behavior, the influence of high PPE level on financial leverage behavior should be also considered together with growth opportunities. Despite the difference from the hypothesis, the result of this study affirms Dalbor and Upneja's (2004) finding on the positive effect of growth opportunities variable on long-term debt level. Some determinants including growth opportunities and profitability might seem to behave differently from what the agency cost theory predicts, but these seemingly contradictory results still remain in the scope of the theory if high PPE in lodging firms is considered. The discovery of this unique financing rationale of lodging firms bears great implications for the lodging industry as well as the lending institutions. Lodging firms with higher fixed asset levels should be able to negotiate for more preferable debt arrangements than their lower fixed asset counterparts. Moreover, if investments for growth opportunities are made in the form of fixed assets such as lands, buildings, and properties, the lodging firms should be able to borrow at low cost regardless of the potential risks associated with the investment.

This study is not free from limitation. The major limitation may be a lack of industry-specific variables to measure the selected capital structure determinants. As Sheel (1994) states, the low explanatory power of the first model and the strong significance of the dummy variable suggest the necessity of using industry-specific variables. This study also assumes that all companies included in this study have the similar types of long-term debt contracts. However, some firms might have long-term debt contracts with covenants, which could lower the debt costs. In addition, future research based on the data of property level, instead of company level, would also provide useful information to understand the financial characteristics and behavior of individual properties.

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PROBABILITY OF SUCCESS AND INDIVIDUAL CONTROL PREFERENCES: THREAT RIGIDITY POTENTIALS
IN NEW BLACK BOX GROUPS

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ABSTRACT

Small group interaction inevitably involves conflict-management designed to prevent, ameliorate, or resolve disagreements between and among individuals and groups. This study strengthens current knowledge on group collaboration by exploring the argumentation and challenge components of small group productivity through empirical and qualitative research involving two constructs: (1) the probability of individual success in juxtaposition with (2) individual student group control tendencies. A broad range of highly significant positive and negatively correlated data emerged from the comparison of the two constructs to all other survey responses.

INTRODUCTION

The nature of new small group interaction inevitably involves some form of conflict-management defined as efforts designed to prevent, ameliorate, or resolve disagreements between and among individuals and groups. Conflict can occur through normal group interaction, or it can be initiated because of the need to introduce change that some will usually oppose or view warily. Variations in motivation, time management and learning styles, maturity, and other factors that influence worker performance increase diversity in the segment of the labor force most crucial for achieving educational outcomes (Lengnick-Hall & Sanders, 1997). Social scientists such as those working on organizational behavior theory (Berger & Zelditch, 1985) and organizational effectiveness (Hackman, 1990) address issues concerning small groups, but they do not conceptualize the principles through which the group *itself* operates. Consequently, the small “black box” group is left defined as a mediation form linking social structure and individual action. Organizational settings require a behavioral mode dependent upon members who are not afraid to think outside the current organizational framework for long term solutions to current and emerging issues.

From a review of the literature, the conflict resolution and cognitive approaches fail to address a critical issue – the conditions under which students become aware (or fail to become aware) and react (or choose not to react) to a problem existing in their environment. This small group research builds on the work of Staw, Sandelands, & Dutton (1981) and a recent study by Harrington, Lemak, & Kendall (2002) involving threat-rigidity in newly formed groups. Harrington, et al. (2002) tested the hypothesized effects of internal or external attribution of threat and likelihood of success or failure on constriction of control and restriction of information based on Staw, et al.’s (1981) threat-rigidity thesis. Staw, et al.’s general thesis proposed that a “threat to the vital interests of an entity, be it an individual, group or organization, will lead to forms of rigidity.” The results in Harrington, et al. (2002) suggest that both the level of threat and internal attribution of threat have a significant effect on decision-making processes. Furthermore, their findings indicate: 1) teams under high threat use more rigid decision-making processes than teams in low threat situations; 2) teams with internally attributed threat will use more rigid decision-making processes; and 3) teams with an interaction of internally attributed threat and high likelihood of success will use more rigidity in decision-making processes. Hence, heightening the students’ interactive, free-voiced argumentation process to achieve greater group leaning output levels is especially relevant to later organizational collaborative endeavors.

THE VALUE OF GROUP LEARNING ON ORGANIZATINAL CULTURES

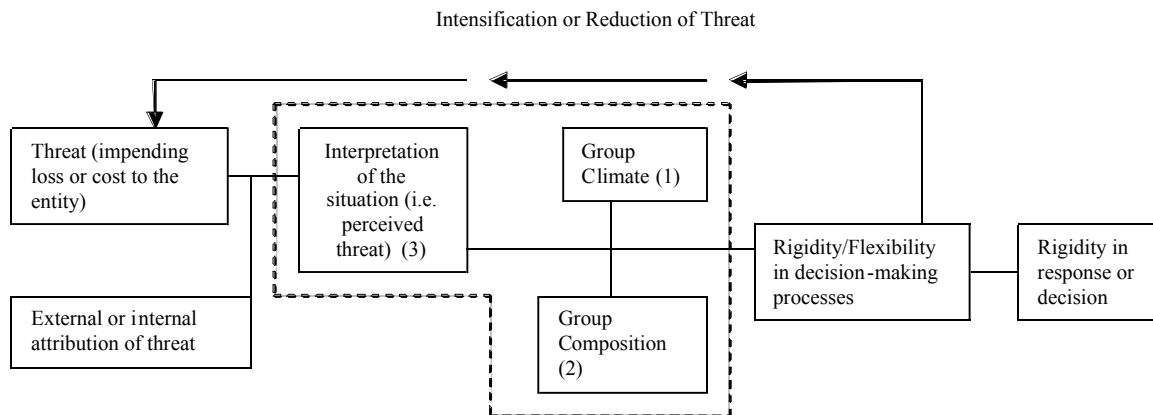
Although “learning” carries a positive connotation in many cultures, research on organizational learning clearly shows it may or may not produce good outcomes. Organizations can learn to do bad things, from society’s perspective, such as organizing illegal activities or colluding to hard society (Baker & Faulkner, 1993) Organizations can also learn things that are incorrect. In superstitious learning, a firm may incorrectly conclude its own actions caused a valuable

outcome and repeat that action, producing harmful outcomes (Argyris & Schon, 1978; Levitt & March, 1988). Organizations may also be myopic, overvaluing information from the current period, local situation, or past success (Levinthal & March, 1981; Mezias & Glynn, 1993). In principle, organizations (and populations of organizations) can learn both “too early” and “too late” in terms of their environments. An adaptive outcome of learning processes may depend on the interaction of learning processes at different levels (Levinthal, 1991). The small group environment can facilitate questions concerned with changing the fundamental aspects of a project or organization. The governing variables (Argyris, 1974) are valid information, free and informed choice, and internal commitment.

Considering the findings of the Harrington et al. (2002) study and current literature thought, this study seeks to correlate previous research using the theory of Argyris (1972) which states: 1) a linear relationship exists between values on conformity to externally imposed rules versus self-direction from the highest to the lowest socioeconomic class; 2) the sequence of events necessary to achieve organizational goals must be divided into units manageable by individuals; 3) humans are programmed, biologically and socially, to grow and become acculturated in certain directions, and to seek a sense of self-acceptance; and 4) individuals strive toward relative independence, autonomy, and elative control over their immediate world.

The posits of Argyris (1972) regarding the complexity and focus of the individual depict the “black box” nature of the new small group (Figure 1). The black box of the group process implies that the *group climate* (refers to social, interpersonal, and the culture [agreed upon rules] of the group) reacts in combination with the *group composition* (race, gender, age, educational level, values, and functional background, background differences and experiences, group size, and group tenure), which are both coupled with the individual differences and perceptions. Thus, a collective interpreted level of a perceived threat is not constant from one individual or group to another. The recent work of Thibodeaux, Harrington and Oubre (2005) argue that apprehension and stress are more catalytic than causal to small group rigidity issues. Such concerns can subside or, as indicated in Figure 1, intensify adopting self-fulfilling prophecy characteristics.

Figure 1: Threat-rigidity Cycle for Newly Formed Groups



Purpose of the Study

This initial research seeks to discover the common threads, which can trigger rigidity to perceived threats in small groups. From a review of the literature and theory on “black box” group interaction, it would appear that individual autonomy, individual interaction schema, individualistic levels of involvement and motivation for achievement and social factors are controlling factors of perceived threat resulting in rigidity. Staw et al. (1981) suggested that threat might cause decision-makers to rely on well-learned responses, restrict information processing and constrict decision control. Ultimately, the purpose of this project is to extend previous empirical research by investigating how the hypothesized moderating effects suggested in Staw et al. (1981) and Harrington, et al. (2002) may affect decision-making processes for individual members of newly formed teams. Specifically, this study tests the hypothesized relationships on internal attribution of threat, and likelihood of success or failure on constriction of control and restriction of information. This study intends to shed some light on what is the relationship of threat and rigidity on individuals in small groups to the moderating effects on decision-making processes (Figure 1). A second research question asks – What is the effect of the moderating effects perceived individually to the small group, as a whole? This research examined the individual in an attempt to determine the correlation determinants leading to threat rigidity as they relate to the individual probability of success and willingness to assume control of the endeavor, and their possible effects in the black box of small groups. Therefore, this research seeks to address the following hypotheses:

- Ho: *Gender will have no bearing on interactivity or probability of success in the small group setting.*
H1: *A preference for individual autonomy can cause rigidity relationships.*
H2: *The level of individual security and positive group interaction is inversely proportional to the group member's level of perceived threat, internally.*
H3: *Internal threat attribution will trigger decision-making rigidity irrespective of external threat conditions*
H4: *Individual interaction, involvement, and trust are key perceptual indicators of successful outcomes and, thus, direct group decision-making rigidity.*

Definitions.

“Rigidity” refers to the tendency of decision-makers to rely on dominant responses, restriction of information and constriction of control in the decision-making process. Because the opposite of this (restriction of information and constriction of control) suggests a lower probability of formulating a rigid response by the group, “flexibility” in group decision-making processes will refer to the opposite of “rigidity.” The flexibility concept is closely aligned with suggestions by other research in decision-making processes (Butler, 1997; Eisenhardt, 1989; March, 1988; Sharfman & Dean, 1997). “Culture” and “climate” are not synonymous, but are complimentary. “Perceived threat” refers to both external (competition, instructor’s response, time constraints, level of competition, and complexity of the project), and internal (student’s level of performance, cognitive ability, involvement and interaction, and confidence in team members) threats. Threats are considered “adverse environments” defined as an environment that is perceived as relatively highly uncertain and may include unexpected or unpredictable forms of change, fast-paced change or appear threatening to a group. The perceived adversity in the environment by the decision-making group is posited to include one or a configuration of these elements (Harrington, et al., 2002).

METHODOLOGY

The study is a replication and extension including student survey data from a large western university, a large southern university, and a small southern university. All subjects were undergraduates. The context of the study permits careful monitoring of the process, control of threats (treatments) and provides a realistic context for the participants. The study was conducted in an academic setting that provides more control than the typical field study, more realism than a laboratory study, and measures of both internal and external validity. Individual respondents were freshman and sophomores not engaged in group activity. Group respondents were juniors and seniors involved in group work requiring strategic decision-making and developing a strategic business plan. The average age of the respondents was 23.1 years (range 20-32) of age. Forty-two percent of the respondents were male and 58% were females. The overall number of respondents in the study consisted of 982 students. The unstressed category consisted of 587 students, (243 males, 344 females), and stressed respondents totaled 395 (170 male, 225 female).

The overall reliability of the instrument used was .8893 (Cronbach’s Alpha). The instrument used a 10-point Likert-type scale anchored at the upper and lower ends of each item. The instrument consisted of 20 questions. The Items’ were chosen from previous research (Eisenhardt, 1989; Gladstein & Reilly, 1985; Sharfman & Dean, 1997; Veiga, 1991) where possible so that the measurement instrument reflects the most reliable measures available. Most of the items were modified slightly. The same instrument was utilized at all surveyed institutions to protect content validity.

The measures utilized in the study include the following. 1) *High or low threat*: the variable was treated as dichotomous. The criteria used for this decision were based on the relative weight of the project on students’ grade, the level of competition, time pressure, and the complexity of the project. 2) *External attribution of threat*: example questions include “Did you feel threatened by the time constraints for this task?” and, “How apprehensive do you feel about how your instructor will respond to your decision?” 3) *Internal threat attribution* example questions include: “Would you be willing to take control of the group to protect your grade?”, “How satisfied are you with your teams standards of performance?” and, “To what extent do you have confidence in your team members?” 4) *Likelihood of success* example items include “What is the probability of your being successful in the task?” and “How confident is your team that you will achieve your expected outcome for this task?” 5) *Flexibility/rigidity in decision-making processes* example measures include “To what extent do people in your group offer new ideas for solving decision related problems?” and “How much influence did each team member have in the final decision-making process?” Bivariate analysis (chi-square and T-test) and ANOVA were utilized to confirm the significant findings.

RESULTS

Probability of individual success.

The majority of this construct’s significant correlations are positive in nature. As the probability of the individuals’ success increases, stress, though still in existence, moves from the forefront. Expectations are heightened, and team

members could be prone to encouraging in their interactions and inter-personal involvement. The individual can be satisfied with the level of performance of the group as a whole. The group members show flexibility in the decision-making process and the individual students can feel more comfortable presenting and sharing ideas or solutions because rapport could be such that the student can feel that the other members are attentive to what he (she) has to say. The student's exhibit confidence in each other, and because there is flexibility, there could be a common feeling of effective work accomplishment. The individual student could feel influential in playing a contributory role in the group's success. Therefore, the student's perception should be one of control over his (her) destiny regarding a positive outcome for the task.

Positive Correlation	Pearson <i>r</i>		Figure 2						
			Bivariate Correlation: Probability of Success						
Expectations	** 0.354								
Encouragement	** 0.247								
Performance	** 0.170						Negative Correlation	Pearson <i>r</i>	
Ideas / Solutions	** 0.314						Competition	**-.0218	
Attentiveness	** 0.236						Additional Information	**-.0216	
Sharing Information	** 0.267						Issue Complexity	**-.0118	
Member Influence	** 0.202						Time Constraints	**-.0227	
Member Confidence	** 0.284						Instructor Response	**-.0318	
Expected Outcome	** 0.511						Open Disagreement	**-.0160	
Confidence in Outcome	** 0.604								
Effective Work	** 0.450								
** <i>Correlation is significant at the 0.01 level (2 - tailed).</i>									

The negative correlations indicate that as the probability of individual success decreases, the student can begin to discontinue his (her) concern for the external threat of competition from other groups. Open disagreements could begin to increase as rigidity correspondingly increases. Group members could be less interested (less flexible) in additional information to resolve any issue, and these issues could appear more complex than originally defined. Group member concern for the external threat of time constraints on project completion, and the response of the instructor to the group's outcome could begin to lessen.

Individual orientation.

Three survey items: "I do not like team projects because I like to have total control over the grade I receive", "I dislike team members who are satisfied with lower work standards", and "When my team consists of individuals with less knowledge or lower skill levels than my own I always take control to insure the best possible outcome." were included, in addition to the original instrument items, on the large and small southern university questionnaire to explore student individual autonomy orientations. These three items were included on the questionnaires for both "stressed" and "unstressed" respondents collectively.

The collective responses (Figure 3) demonstrate a dislike for group projects and a preference for total control over grades (group mean = 7.5, and individual mean = 7.03). This preference, compared to the student's perception of the team's standard of performance, indicates that an inverse relationship exists. If team member performance standards are lower than the individual student's achievement goals, this dislike will increase the students rigidity and the student will probably exercise his (her) preference to take control of the situation preferring not to entrust the group grade to those with lower personal achievement expectation ($r = -.227$, $p = 0.04$). The dislike for team members satisfied with lower grades ($r = .459$, $p = .0001$) is directly related to the higher achieving student's unwillingness to be flexible, thus, the student might simply take control of the group work.

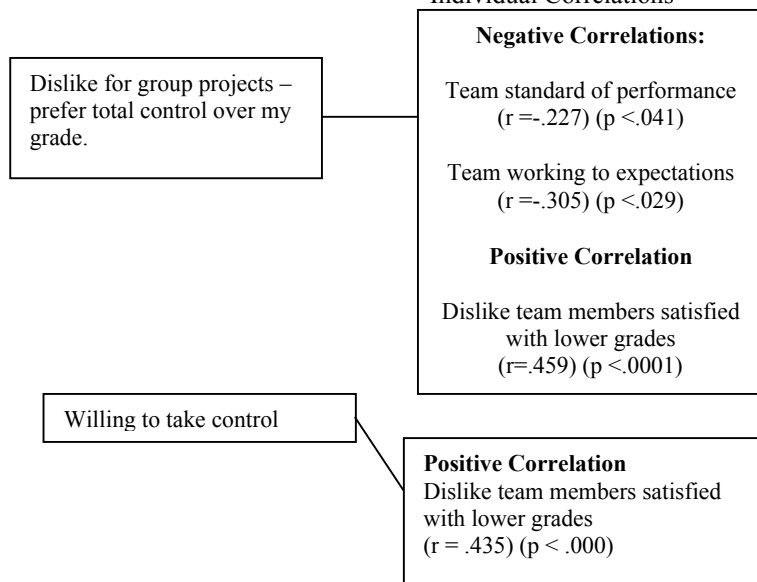
Motivation, interaction, and involvement, leading to superior productivity in small "black box" groups, do involve social and behavioral forces. However, knowing "who" is either positively or negatively persuading, and "who" is being positively or negatively persuaded along a fluctuating time continuum should more effectively improve the productive output level of the dynamic small group. The collective group output occurs much like a "weighted average" of group opinion subject to personal forces, as well as internal and external threats. How the individual group members choose to deal with these forces and threats are a primary determinant of the group's ability to be productive. By nature, humans tend to prefer individual autonomy, which leads to the question: "What conditions in a group lead to a "loss" of self (de-

individualization) and a high susceptibility to interpersonal influence (pressures toward uniformity, or choice shift) (Friedkin, 1999)?”

Gender

Being male or female for group involvement purposes was not shown to have significance as related to apprehension ($p = .759$). There was also no significant indication that gender had any effect on a student's perception of individual probability of success ($p = .060$). In the study's comparison of gender to stress, males ($r = .227$), females' ($r = .254$), showed no significant differences in their respective methodological approach to these constructs as related to group composition. Therefore, the analysis of the data fails to reject the null hypothesis.

Figure 3
Individual Correlations



Probability of individual success

The data indicates that student concern for individual success could be a causal factor to group member reactions to both internal and external threat attribution. Should the student's perception of success diminish, the data driven reaction would almost certainly trigger internal threat conflict as the positive correlations of this construct indicates. The negative correlations are primarily externally directed, and become of lesser concern to group members dealing with internal threat. Conflict is predominately linked to internal attribution and the antecedent role of individual autonomy and thus an injurious situation to group unity and productivity. Thus, hypothesis H1 was supported. To improve group interaction and collaboration, two conflict forms generate concern. (1) Conflict is sometimes harsh and abrasive resulting in hurt feelings, and the creation of barriers sometimes not easily overcome. However, a worse scenario of opposing action can quickly take hold of the group process in the subtle conflict. (2) When the expected outcome becomes unclear, internal threat attribution can occur. This uncertainty can result in apprehension, diminishing the perception of the individual's probability of success thus triggering additional stress. Should this occur, another group member may attempt to take control of the situation, and the other group members, searching for stress relief and solutions to the confounding issues, may willingly allow this to occur in the hope for potentially more promising group results. Thus, "coping" can be viewed as a viable option which, if allowed to become the rule rather than the exception, can result in "groupthink" defined as a pattern of thought characterized by self-deception and the manufactured consent and conformity to group values and ethics. The inherent danger lies in the student's preference to avoid conflict and thus coping, an antecedent of groupthink, can be seen as a viable group methodology to be included in the student's personal problem-solving inventory. Under these circumstances, problem solving about technical or interpersonal issues would be rather ineffective. Thus, hypothesis H2, H3, and H4 were supported.

Flexibility

A primary group function is to identify the project objectives, comprehensively survey all possible means of achieving organizational objectives, and make a choice that maximizes efforts, and reaches some acceptable level of achievement (Lindblom, 1968). Effective action is more a succession of comparisons between actions and feedback, which in turn provides information for the next action or achievement. Thus, the group's effectiveness is based in part on

collective learning. The degree to which interpersonal, group, and inter-group factors produce valid information for decision-making hinges on the freedom to explore alternatives and the receptivity to feedback because as problems become increasingly complex and ill structured, the need for learning increases. The literature suggests that the factors that inhibit valid feedback tend to become increasingly more operative as the decisions become more important and more threatening to the participants in the decision-making process. Valid information appears to be more easily generated for less important and less threatening decisions.

Individual autonomy

The primary strategy is to control the relevant environment and tasks unilaterally and to protect themselves within groups unilaterally. The underlying behavioral strategy is control over others, although people vary widely in how they control others. For example, proposing a strong concept to others and defining its validity for them is one of the most powerful ways to control others. The danger of group rigidity lies in individual rather than collective control. Control as a behavioral strategy, influences group members and the group's environment in that it tends to produce defensiveness and closed ness because unilateral control does not tend to produce valid feedback. Moreover, controlling behavior unilaterally may be seen by others as defensiveness. Groups composed of individuals using such strategies will tend to create defensive group dynamics, reduce the productiveness of valid information and reduce free choice. Thus, hypothesis H1 was further substantiated. The later organizational setting implication would be the preference for suppressed open debate and thus, the testing of ideas, especially important or threatening ideas. This closely resembles single-loop learning described by Argyris (1974) as it does not promote the questioning of the fundamental design of the organization, its goals, and its activities thus limiting exploration and information to assist the maintenance of fundamental organizational stability. Individual autonomous control does not promote the search for valid information, free and informed choice, and internal commitment. Unilateral control usually accompanies advocacy and "to win" is the typical purpose.

Personality and organization roles

Organizations are designed to tap the energy and commitment of individuals who are to perform roles, produce work, and achieve goals of the organization. Many organization variables are designed, therefore, on an explicit or implicit model of man. The concepts of centralization, decentralization, and span of control have developed around the problem of controlling and motivating human behavior (Argyris, 1972). The following steps indicate how the models of man and of formal organizations are developed. (1) Organizations come into being when goals to be achieved are too complex for any one individual. The sequence of events, necessary to achieve these goals, has to be divided into units manageable by individuals. (2) Individuals are themselves complex organizations. They produce the energy for an organization if there is some gain for them. The gain individuals seek can be understood by understanding their needs. (3) The individual seeks to fulfill his [her] pre-dispositions, yet their exact nature, potency, and degree to which they have to be fulfilled are influenced by the organizational context. (4) Humans are programmed, biologically and socially, to grow and become acculturated in certain directions, and to seek a sense of self-acceptance. Hence, man strives toward relative independence, autonomy, and relative control over their immediate world as these steps formulated by Argyris (1972) would imply. To the extent that there is an incongruent relationship between the needs of individuals and the requirements of a formal organization, the individuals will tend to experience: (1) frustration, (2) psychological failure, (3) short time perspective, and (4) conflict (Argyris, 1964).

Collective empowerment

Group members, as formulators of ideas and solutions feel collectively responsible to present personal evaluations and attributions so as to encourage open and constructive confrontations. The organizational setting implication of this form of group learning will facilitate students as "products" who are capable of producing end results that increase effectiveness in decision-making or policy-making, monitoring of decisions leading to organizational policies, and increased probabilities that errors and failures would be communicated openly. This will allow members to actively learn from the feedback thus reinforcing the belief that the need for honest dialog is greater than the need to avoid the potentiality of hurt feelings. Unilateral control must be rejected; therefore articulateness and advocacy are coupled with an invitation to confront one another's views and to alter them in order to produce the position that is based on the most complete valid information possible and to which group members continue internally committed. Every significant action should be viewed in terms of the degree it helps the participants generate valid and useful information including relevant feelings thus solving problems so that it remains solved without reducing the level of problem solving effectiveness. Collective empowerment involves sharing power with anyone who has competence, and with anyone who is relevant in deciding or implementing the action in the definition of the group task. Face-saving (Argyris & Schon, 1978) is discouraged because it is seen as a defensive strategy, and a non-learning activity. The major function of the group would be to maximize the contributions of each member developing a synthesis indicating the widest possible exploration of views would have taken place.

This study indicates that hospitality educators must delve deeper into the underpinnings of group interaction to construct effective group learning environments for correct learning messages to be transmitted because interdependent achievement does not occur automatically. Each group member must learn to understand his (her) personal tendencies, philosophy, and inherent method of social involvement and interaction. To become successful organizational “products”, an understanding of conflict management methodology is paramount to instilling an unshakable confidence in the student’s ability to address complex matters through collective interaction. Organizational settings require a behavioral mode dependent upon members who are not afraid to think outside the current organizational framework for long-term solutions to current and emerging issues. A group comprised of individuals, oblivious to both external and internal threat attribution, can be a primary transformational force and instrument to achieve organizational security and superior outcomes.

Some people with strong autonomy preferences may have accumulated relatively little experience with teamwork in their work lives. If they were to experience a highly interdependent group, their preferences might be altered. According to Breer & Locke (1965), people placed in a group with others who are comfortable with highly independent work, people with strong autonomy preferences might gradually come to tolerate and be effective in such settings as well. Over time, then, a highly task-interdependent group with group-based rewards would produce more of a decrease in autonomy preferences than any other combination of any other task and outcome interdependence. Thus, autonomy preference may moderate the effects of task interdependence on motivation and satisfaction, and they may also be changed as a result of experience with interdependence. A learning environment with a behavioral integration focus could prove extremely conducive to small group member productivity skills. Interpersonal and inter-group conflict is a natural part of the group socialization process. The challenge is not to eliminate such conflict but to minimize its potentially destructive impact and make it a positive force in the new small group and eventually the organization. A student who has weathered conflict that resulted in resolution can deal more calmly and appropriately with conflict because the student understands that such conflict is resolvable. Later, in an operational setting, this student would therefore be better equipped to mediate and overcome organizational situation conflict and redirect conflicting energies into improved collaborative encounters.

DISCUSSION AND CONCLUSION

The intent of the study was to examine the data for purposes of facilitation and improvement of small group interaction, collaboration, and ultimately, achievement from the individual perspective as it relates to collaborative efforts. All hypotheses were supported. Two constructs emerged from the bivariate analysis of the data: probability of individual success and willingness to take control to protect one’s grade. Both constructs exhibited highly significant statistical relationships to the overall effectiveness of the small group output. Although the data indicated highly significant statistical relationships, these relationships, quantitatively, are not practical relationships due in part to the large sample size. The data exhibited plausible explanations for inter-group conflict and was therefore utilized, from a qualitative perspective, to construct a theoretical paradigm for later quantitative analysis. The quantitative findings and qualitative theoretical rationale are presented to fairly represent the plausibility of the study’s generalization. This paradigm (qualitative) suggests that impending threats interface with the climate and composition of the group to affect the formation of individual group members’ reaction, as well as the level of reaction exhibited. The response in terms of rigidity or flexibility will largely be determined, individually, and as a group, by the external or internal nature and intensity of the threat. These constructs (probability of individual success and willingness to take control) are interpreted with regard to the perception of internal or external threat, the potential for success, and the tendency for flexible or rigid decision making implementation. For our data approach, i.e. the bivariate analysis, the data was treated collectively to most accurately represent the small group collective mindset - different perceptions and states of stress can co-exist simultaneously in group interaction.

Motivation, interaction, and involvement, leading to superior productivity in small “black box” groups involve social and behavioral forces. Knowing “who” is either positively or negatively persuading, and “who” is being positively or negatively persuaded along a fluctuating time continuum should more effectively improve the productive output level of the dynamic small group. The collective group output of group opinion is subject to personal forces, as well as to internal and external threats. How the individual group members choose to deal with these forces and threats is a primary determinant of the group’s ability to be productive. Thus, autonomy preference may moderate the effects of task interdependence on motivation and satisfaction, and they may also be changed as a result of experience with interdependence. A learning environment with a behavioral integration focus could prove extremely conducive to small group member productivity skills that will follow into the organizational setting. In hospitality education, learning and students’ improved knowledge and skills are the primary deliverables. Thus, students as products, is as important to assess as conventional views of customer satisfaction when evaluating the effectiveness of a learning system. Changes in knowledge, skills, and abilities are expected to endure beyond a student’s affiliation with an educational institution.

Recommendations for future studies

Future studies might delve further into reasons why students tend to internalize and become self-inclusive when faced with uncertain circumstances. Additional study of the probability of individual success, currently under-theorized, might prove useful in further disclosing the collective outcome process. The need to unravel the initial autonomy preference versus a collective output could also produce fruitful exploration.

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COMPETENCY ASSESSMENT FOR ENTRY-LEVEL LODGING MANAGEMENT TRAINEES IN TAIWAN

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ABSTRACT

The lodging industry in Taiwan is forging new links with the hospitality management academia in the chain of supply and demand for entry-level managerial personnel. Essential competencies for entry-level lodging management trainees based on input from industry professionals and academic educators in Taiwan, provided the basis for this investigation. ANOVA was employed in testing relationships between perceptions of lodging management personnel and hospitality management educators. Sixteen significant differences ($p < .05$) were found between two groups within the 60 competency statements investigated. Recommendations and suggestions for lodging industry, hospitality management education, and future research were included.

Key Words: entry-level managerial trainee, lodging industry, competency, Taiwan.

INTRODUCTION

The number of hotels in Taiwan has grown rapidly over the past ten years to meet consumers' demand. There were a total of 90,700 hotel rooms in 2003 in Taiwan (Taiwan Tourism Bureau, 2003). Although Taiwan's hospitality and tourism industry was affected by a major earthquake in 1999, SARS in 2003, and a recent recession, industry leaders are confident about the industry's continued growth and stability (C. Chen, personal communication, December 20, 2003). The Taiwan Tourism Bureau (2004) also reported that 47 tourist hotels with 11,396 hotel rooms will be added to the competitive market by 2006. The lodging industry in Taiwan needs a capable, educated, and well-trained workforce in order to be successful in the competitive market (Purcell, 1993).

In an effort to address industry needs, hospitality management (HM) programs in Taiwan have increased from seven undergraduate programs and one graduate program in 1995 to sixty-four undergraduate and eighteen graduate programs in 2002 (Horng, 2003). Okeiyi, Finley, and Postel (1994) indicated that many large hospitality firms now recruit 30% to 90% of their management trainees from HM programs. Zuber (1997) confirmed that the hospitality industry has changed its recruiting practices, relying heavily on university programs. Higher education supports the hospitality industry by providing many entry-level managers to fill the diverse industry demands. Despite their best efforts, HM programs are often criticized by employers as not meeting the needs of the hospitality industry. Gale and Pol (1980) maintained that the first step in planning an educational program is the description of competencies required for successful functioning in a position. This study was designed to assess perceptions of lodging industry professionals and HM educators regarding competencies needed by successful entry-level lodging managerial trainees in Taiwan.

HOSPITALITY MANAGEMENT COMPETENCIES

Tas (1988) started a competency assessment in the hospitality industry setting study in the early 1980s. According to Partlow and Gregoire (1994), educators must continually identify and investigate the essential competencies that are recognized by the industry professionals. Brophy and Kiely (2002) declared that a competency assessment benefits in succession planning, training and development, recruitment and selection, and performance appraisals. Possession of the competencies enables an individual to perform the required function much better than others who do not possess the relevant competencies (Nath & Raheja, 2001). Human-relations skills are frequently noted as highly valued. Tas (1988) developed and ranked a list of competencies by studied 75 top US hotels. Among the 70 competencies identified, 36 of them were proposed as the basis for decision-making in curriculum development for HM programs. Tas also suggested that university-level HM programs curriculum

should focus on experiences both in the classroom and in the field that enable the students to develop the essential competencies. Thus, Lefever and Withiam (1998) stated HM education programs curriculum review should be a continuous task.

Based on Sandwith's (1993) managerial competency-domain model, Tas, LaBrecque, and Clayton (1996) conducted a competency study for property management trainees. The highest ranked competency statements were interpersonal, leadership, and conceptual skills. The study further concluded that well-defined skill competencies for a position encouraged job occupants to work more effectively. Kay and Russette (2000) conducted 52 personnel interviews based on a competency assessment survey designed by Tas, LaBrecque, and Clayton (1996) and Sandwith's managerial competency-domain model. The study concluded that essential competencies constitute a foundation for the development of job descriptions and provide the basis for training and career development in the hospitality industry. Although the differential approach focuses primarily on competency, the focus from the hospitality industry and HM educational perspectives is on performance outcomes and shaping behaviors so that people can be successful. Chung-Herrera, Enz, and Lankau (2000) noted that competency model was also useful for building an integrated framework for developing a company's human resource management system. They further concluded that using industry-wide competency models can help in educating future generations of leaders by guiding university facilities in designing curricula to meet the industry's future needs.

TAIWAN HOSPITALITY COMPETENCY RESEARCH

Wang (2001) studied the employee competencies found in the food and beverage departments in Taiwan. He concluded that education, language skills, professional appearance, and a hard-working attitude were four basic requirements reported. Wu (2001) administered "The Competency Analysis for Managers of Chain Restaurants" to current chain restaurant managers in Taiwan. Seventy-three competency statements were investigated and 46 competencies were deemed essential. Technical and problem-solving competencies were found the two most important competencies for chain restaurant managers. Marketing management was the component most in demand for chain restaurant managers. Lin (2001) studied students' professional competency in the Department of Food and Beverage Management in a high school, with ten different domains and 95 competency statements. Participants included 684 students, 152 faculty, and 42 industry professionals. Professional competencies required of students as a matter of immediate urgency included language skills and computer applications. According to Wang (2001), Wu (2001), and Lin (2001) all the competencies studied were transferable from one functional area and management level to other areas and levels.

Lin (2002) investigated Taiwan hospitality curricula and explored with 200 industry professionals the relationships between hotel management courses and industry required competencies. The results indicated that the competencies relating to communication and adaptability most influenced career success. The study also found that finance/marketing/personal management, foreign languages and communication, and quality management curriculum dimensions were significantly related to competencies of communications skills and adaptation to environmental changes. Lin further concluded that in Taiwan a hotel education should balance a general education and a specialized education, and a continuing dialogue about the course content between educators and industry practitioners is also crucial to keep curriculum current for meeting the needs of the industry.

Merging Competency Models

Due to the diverse hospitality industry and composite of ownership patterns, varying management structures offer a variety of services. Lin (2002) stated that there is a need to balance the hospitality industry demands and HM supplies in Taiwan. There has long been a relationship between universities and the hospitality industry that manifests itself in the areas of management development, teaching, conference interaction, and applied research. For example, the International Council on Hotel, Restaurant, and Institutional Education (I-CHRIE) has served as a forum for interaction between educators and industry professionals since 1946. The Accreditation Commission for Programs in Hospitality Administration (ACPHA) was established in 1989 to accredit programs at the bachelor's degree level (Hutton, 1997). The Commissions standards provide a widely accepted set of educational standards. However, Ashley et al. (1995) noted that HM programs today are as diverse as the opinions offered by both the industry and educators regarding the adequacy or inadequacy of current approaches to prepare tomorrow's managers for the hospitality industry.

Prabhu (1996) assessed the extent to which industry-education perspectives coincide with the issue of key management competencies. Goh (2001) pointed out that the task of maintaining alignment between industry and curriculum is a continuing challenge. He noted that students, educators, and human resource specialists must respond by being innovative in terms of course direction, content, programming, and delivery. Other initiatives emphasized industry-education partnerships in lodging, food and beverage service, and tourism; however, efforts to ensure that educational

programs meet the industry's demands have been debated for decades. Sandwith's managerial competency-domain model (1993) is widely used to organize thinking about competencies. This approach was adopted from Brophy and Kiely (2002) and Tas, LaBrecque, and Clayton (1996) and has led to a sharper definition for relevant behavioral indicators.

METHODOLOGY

Population and Sampling Procedures

The two major populations for this study are management personnel who work in hotels in Taiwan and HM educators who teach lodging or hospitality related courses in colleges and universities in Taiwan. Non-probability sampling procedures, convenient sampling, and the snowballing techniques were employed. A subset of 195 participants was selected from the target population: lodging management personnel (35) and HM educators (160). Tourist hotels listed on the Taiwan Tourism Bureau were contacted by phone. Names supplied by each selected hotel's human resource department were compiled into an email list for the lodging management personnel sample. All selected HM educators' emails were gathered from the HM programs' websites in Taiwan.

The snowballing technique was used to recruit respondents from the target populations (Rogelberg, Church, Waclawski, & Stanton, 2002). Selected recipients forwarded the invitation to potential participants who had similar backgrounds. Sample size was not pre-determined, but the process continued until the new responses dwindled, indicating saturation of the available convenient sample pool.

Instrument

A questionnaire consisting of 60 competency statements was employed for the study. All respondents were asked to rate the importance for each competency statement relating to entry-level lodging managerial trainees. The questionnaire was designed around the framework of Sandwith's (1993) managerial competency-domain model, which included conceptual, leadership, administrative, interpersonal, and technical skills. The actual competency statements were based on the study done by Tas (1988) and Tas et al. (1996), as well as Tsai et al. (2004). A continuing-scale measurement, five-point Likert scale (1 = Least Important; 5 = Extremely Important), was used for all 60 competency statements. Demographic information was also included in the instrument.

The instrument was developed in English, and then translated into Chinese by the researcher. It was then translated back into English by two educators who understood both English and Chinese. The second English translation was then compared to the original to ensure the same understanding was achieved. The overall reliability was reported at level of $\alpha = .963$. The finalized survey was posted in Chinese on the web, hosted by Freeonlinesurveys.com.

Data Collection

A web-based survey hosted by Freeonlinesurveys.com was used to collect data for the study. An invitation was emailed to selected participants. The invitation contained an explanation of the purpose of the study, a survey website hyperlink, and how to forward the survey invitation to their colleagues.

The first request was sent during the second week of September 2004. Seven days later a follow up message was sent to the participants to encourage their participation in the survey. If someone already completed a survey, or was not interested in responding to the survey, he or she could simply ignore the reminder. The data collecting process ended September 30, 2004. All subjects were voluntary participants in the study. All email addresses were destroyed upon completion of data collection. A summary of the study was provided to interested participants when the study was completed.

To maintain database integrity, efforts were made to prevent unsolicited respondents from participating in the survey. The invitation to participate and the survey materials made clear who was eligible and who was not eligible to participate. The host server was able to track respondents and prevent multiple replies from the same computer.

Data Analysis

The Statistical Package for the Social Science (SPSS v.10, 2000) was used to process the collected data. Descriptive statistics were computed in ranking the importance of competency statements. Factor analysis principle components analysis (VARIMAX rotation), was computed to simplify data for later analysis. Cluster analysis was used to categorize different groups of respondents, and analysis of variance (ANOVA) was employed in detecting the relationship between lodging industry professionals and HM educators' perceptions on competencies for entry-level lodging managerial trainees. The 0.05 level of significance was set for the statistical tests in this study.

RESULTS

After a three-week period of online data collection, the overall response rate was 45.64%, which contained with 104 usable responses. Since the demographic information was an optional section in the survey, some respondents chose not to complete this section.

Factor analysis indicated 14 factors that explain the 79.84 % of the variance based on the 60 competency statements studied. However, factor 1 composed 54 competency statements out of 60 competencies studied. Consequently, these 60 competency statements may not be divided into different factors.

The usable sample consisted of 104 respondents, there were 35 female (33.65%) and 21 male (20.19%) participants who responded to the study, and the remainder (48 or 46.15%) did not report their gender. The most reported age group was 31 to 40 years old (25.00%). Their education level was high (7.70% four-year university graduates, 28.85% with master's degrees, and 7.70% with doctorates). Although the education level of the respondents with master's degree was reported at 28.85%, the majority of the respondents were the HM educators and only three respondents were the lodging industry professionals. The most frequently reported length of time in current job was between one and five years (21.15%) follow by more than nine years (18.23%). After clustering the data into different professions, 47 or 45.19% of the respondents were lodging industry professionals and 57 or 54.81% of them were HM educators.

Table 1
Sixteen Competency Statements with Significant Difference
between Lodging Industry Professionals and HM Educators

Competency statement	Lodging industry professionals (n=47)		HM educators (n=57)	
	Mean	SD	Mean	SD
Motivate employees to achieve desired performance	4.15	0.75	4.70	0.50*
Accurately implement health and safety regulation	4.23	0.73	4.54	0.57*
Inspect guestroom conditions according to standardized procedures	3.96	0.69	4.47	0.71*
Have leadership for hospitality sector	4.17	0.67	4.44	0.54*
Assist to develop an effective energy management system	3.87	0.99	4.35	0.58*
Accurately manage phone calls, posts, and computer reservation system	4.06	0.70	4.33	0.61*
Assist to develop any preventative procedures	4.02	0.74	4.33	0.64*
Plan and support new personnel training	4.00	0.81	4.33	0.64*
Manage guest requests with understanding and sensitivity	4.66	0.52	4.32	0.91*
A.Q. such as positive thinking while facing any difficulty	4.55	0.54	4.25	0.63*
Knowledge of diverse cultures and social customs	4.49	0.69	4.21	0.53*
Analyze periodical financial and statistic reports	3.66	0.92	4.19	0.81*
Demonstrate professional appearance and behaviors	4.53	0.50	4.14	0.79*
Understand the interior design principles in guest rooms, including color scheme, fabrics, and overall displays	3.74	0.85	4.11	0.72*
Continue to use established personnel management regulations to supervise staff	4.28	0.68	3.96	0.68*
Compile housekeeping reports	3.43	0.97	3.81	0.83*

Note. * Means significantly different by professional position (lodging industry professionals or HM educators) using One-way ANOVA at $p < .05$.

A one-way ANOVA test was used to determine differences in importance scores between lodging industry professionals and HM educators for all competency statements. Table 1 presents the importance scores gathered from both

lodging industry professionals and HM educators. The sixteen competency statements with significant differences were also identified in this table.

Lodging industry professionals identified the following competency statements as significantly more important than did the HM educators: “manage guest requests with understanding and sensitivity,” “Adversity Quotient (A.Q.) such as positive thinking while facing any difficulty,” “demonstrate professional appearance and behaviors,” “knowledge of diverse cultures and customs,” and “continue to use established personnel management regulations to supervise staff.” ($p < .05$). On the other hand, HM educators identified eleven competency statements significantly more important than lodging industry professionals ($p < .05$), that included:

- accurately implement health and safety regulations,
- have leadership for hospitality sector,
- motivate employees to achieve desired performance,
- accurately manage phone calls, posts, and computer reservation system,
- assist to develop any preventative procedures,
- evaluate training programs for new staffs,
- inspect guestroom conditions according to standardized procedures,
- assist to develop an effective energy management system,
- understand the interior design principles in guest rooms, including color scheme, fabrics, and overall displays,
- analyze periodical financial and statistic reports, and
- compile housekeeping reports.

DISCUSSION

Sixty competency statements were evaluated to compare perceptions of both hospitality professionals and HM educators regarding competencies needed in hotels. These competencies were adapted from Tas (1988) and confirmed as important by means of a modified three-round Dephi study (Tsai et al., 2004). There were 16 competency statements reported with significant differences between lodging industry professionals and HM educators. There were no differences between both groups on the remainder of the 44 competency statements.

According to Sandwith's managerial competency-domain model and the results from this study, the interpersonal competencies were identified as more important than other competencies. Based on lodging industry professionals' perceptions, Table 2 shows seven interpersonal competencies fell into the top-ten competencies studied. Lebruto and Murray (1994); Ashley et al. (1995); Tas, et al. (1996); and Wilhelm (1999) also concluded that interpersonal competencies were the top rated competency.

Table 2
Top-ten Competency Statements Ranked by Lodging Industry Professionals

Domain	Competency statement	Industry (n=47)		Rank
		Mean	SD	
Interpersonal	E.Q. such as emotional control and passion	4.72	0.45	1
Interpersonal	Communicate efficiently (orally and in writing)	4.68	0.47	2
Interpersonal	Manage guest requests with understanding and sensitivity	4.66	0.52	3
Conceptual	Understand unique characteristics of lodging industry	4.62	0.57	4
Interpersonal	A.Q. such as positive thinking while facing any difficulty	4.55	0.54	5
Leadership	Maintain professional images and ethics at workplace	4.55	0.54	6
Interpersonal	Develop positive customer relations	4.53	0.50	7
Leadership	Demonstrate professional appearance and behaviors	4.53	0.50	8
Interpersonal	Endeavor to achieving positive work relations based on staff interaction	4.49	0.55	9
Interpersonal	Knowledge of diverse cultures and social customs	4.49	0.69	10

In considering the differences in perceptions between the industry professionals and HM educators, it should be noted that it is not uncommon for differences to arise between the two groups. Several studies (Purcell, 1993; Zuber, 1997; & Okeiyi, Finley, & Postel, 1994) noted that there are gaps existed between the industry and education system. This study reported 16 significant differences between lodging industry professionals and HM educators on their perceptions of competencies for entry-level lodging managerial trainees. Of these 16 competency statements, six were technical, four administrative, three interpersonal, and three leadership. Lennon (1989) and Tsai (2002) concluded that there are considerable difficulties encountered in attempting to ascertain industry needs in an educational context. Tsai stated that the

rapid growth of HM programs in Taiwan has heavily focused on the curriculum development and yet less communication with the industry professionals.

Further, the findings in this study indicated that there was certain degree of knowledge differences regarding the interpersonal and technical competencies studied. Table 3 lists the top-ten competency statements from the HM educators. There were four interpersonal, three administrative, one technical, one leadership, and one conceptual competency statements included. In contrast, Table 2 reports the top-ten competency statements from the lodging industry professionals. There were seven interpersonal, two leadership, and one conceptual competency statements included. Lodging industry professionals weighted the interpersonal competencies as more important than the HM educators. On the other hand, the HM educators tend to give more importance to the technical and administrative competencies. Thus, there is a possibility that the HM educators are emphasizing too much on technical and administrative competencies in their curriculum, whereas the industry professionals are looking for entry-level lodging managerial trainees with better interpersonal skills. This does not necessarily represent a fundamental disagreement between the two groups. Industry professionals do expect management-trainees to have technical knowledge. They do not want the HM programs to stop teaching basic technical skills. However, what they do appear to want is a technically competent person who has strong interpersonal skills. Hospitality educators are faced with the need to teach fundamental technical skills. It is easy for these needs to overshadow the more difficult interpersonal concepts. Time and resources are used up by teaching the technical matters, and thus interpersonal issues are given less coverage.

Table 3
Top-ten Competency Statements Ranked by HM Educators

Domain	Competency statement	Educators (n=57)		Rank
		Mean	SD	
Leadership	Motivate employees to achieve desired performance	4.70	0.50	1
Interpersonal	Communicate efficiently (orally and in writing)	4.68	0.47	2
Interpersonal	Communicate efficiently across different departments	4.67	0.48	3
Interpersonal	E.Q. such as emotional control and passion	4.58	0.53	4
Administrative	Accurately implement health and safety regulation	4.54	0.57	5
Leadership	Efficient decision-making in response to contingencies such as fire, severe diseases, and terrorist attacks	4.51	0.60	6
Interpersonal	Conduct new staff orientations	4.49	0.68	7
Conceptual	Understand unique characteristics of lodging industry	4.47	0.80	8
Technical	Inspect guestroom conditions according to standardized procedures	4.47	0.71	9
Administrative	Understand personnel policies and management procedures	4.46	0.63	10

There are three competency statements that show up in both groups' top-ten ranking (Tables 2 & 3), two of them are interpersonal and one is conceptual. Some degree of agreements was found in the top-ranked competencies by both groups. However, both groups should continue to cooperate and understand each other's needs to better bridge their differences.

CONCLUSION

This study lays a foundation for this consensus. Forty-four of the 60 competencies reached consensus. Further discussion should resolve differences on the remaining 16 competencies. This study also found that both lodging industry professionals and HM educators agreed that leadership, interpersonal, and conceptual competencies were the most important for entry-level lodging managerial trainees.

Three competency statements shows up in both industry professional's and HM educator's top-ten ranking. These statements are:

- Communicate efficiently (orally and in writing)
- E.Q. such as emotional control and passion
- Understand unique characteristics of lodging industry.

These particular agreements were identified in the top-ranked competencies by both groups. Both groups should continue to strive for agreement and alignment of these competency statements. Future cooperation between the two groups should be encouraged to better understand each other's needs and to bridge their differences.

IMPLICATIONS AND LIMITATIONS OF THE STUDY

The results of the study may be used as suggestions for realigning HM curricula in Taiwan. The statistically similar items offer a strong foundation for curriculum development and implementation. The competency listings within the competency domains provide guidance to educators to they develop priorities as they work within resource constraints. The sixteen items that were statistically different offer grounds for further discussion among industry and educational professionals.

The entry-level lodging managerial trainee competency study may help the lodging industry in recruiting entry-level managerial personnel, as well as developing a career path for current and future managers. Results may provide an opportunity for the industry to develop a list of managerial competencies that can be used in better job descriptions. Findings of the study would be valuable to students who currently enroll in hospitality management education. It can serve as a reference to students in understanding what knowledge or competencies the hospitality industry is looking for in hospitality management college graduates.

Sneed and White (1993) noted that the key to long-term success for hospitality managers comes from a balance of education, training, and experience. Utilizing the consensus of lodging industry managers and hospitality management faculty regarding entry-level managerial competencies is important for establishing effective HM programs in Taiwan.

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CULINARY TOURISM: LOCALIZED ECONOMIC IMPACT ASSESSMENT OF NIAGARA-ON-THE-LAKE

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ABSTRACT

The economic sustainability of culinary tourism has become an increasing component of contemporary tourism literature. This study reports the demographic characteristics of the typical culinary tourist, as well as the economic impact of culinary initiatives in a localized setting, where the prevalence of tourism related activities are readily established.

THE CULINARY TOURIST

The notion that, “we are what we eat” may be better represented if considered that ultimately “we eat what we are.” Regional intricacies, indigenous ingredients, and methods of production are not necessarily instrumental in the development of a post-modern society, as much as the post-modern society may be instrumental in developing them. It is in this aspect that tourists or visitors to a specific foreign region can account for the very essence of cultural development, by allocating considerations of identity and uniqueness. On the basis of destination management, it is imperative to acknowledge that our world is shrinking; cultural tourism has forged its market in a globalized economy, and within this finite realm, culinary tourism has emerged as an ever-increasing component of economic sustainability (Hjalager & Corigliano, 2000).

Modern initiatives in the area of culinary tourism have witnessed a progressive relationship between culture and gastronomy. Recent studies have maintained a divided stance as to the categorical classification of the “true” culinary tourist, though acknowledging the lucrative relationship between cultural tourists and dining expenditures (Hjalager & Corigliano, 2000; Au & Law, 2002). In this regard, it has become apparent that regional offerings can have a dramatic impact on destination management (Charters & Ali-Knight, 2002). It is also readily apparent that dining related practices are a viable source of economic growth (Richards, 2000). This study sought to elaborate on the economic impact of culinary tourism in relation to the prevalence of promotional targeting, as well to assess the basic demographic components in an effort to formulate a relatively accurate profile of today’s typical culinary tourist.

LITERATURE REVIEW

It has been said that culinary or gastronomic experiences lend themselves to a marriage with tourism (Dodd, 1995). Hjalager and Corigliano (2000) offered that it was these experiences, which support the intrinsic tranquility, the social environment, and an indigenous educational event. It is the cultural implications provided by a culinary experience that conform to these aforementioned variables; tourists in general may seek some if not all of these aspects while partaking in a vacation activity (Hjalager & Corigliano, 2000).

When assigning value to the culinary aspect of tourism, one must remember that the price structure is inelastic; being that food is one of the necessities of life (Au & Law, 2002). Pyo, Uysal and Mclellan (1991) maintained that it was due to this inelasticity, that among all tourism expenses the allocated budget for food and food related proceedings, were least likely to be displaced in care of a more favourable or economical action. Hjalager and Richards (2002) offered a rationale for such behaviour, in that the acceptance of this price inelasticity is influential in conveying food as an attribute for distinguishing a culture during a tourism experience.

Although compelling, this notion of food as a central focus for tourism activities, would maintain that all tourists may—in some fashion—exhibit a culinary awareness when involved in a tourism destination. While this may be accurate to some degree, it is imperative to segregate the true culinary tourist or “*foodie*” for the basis of a categorical assessment. In an effort to do just that, Finkelstein (1989) offered a three-tier classification model to support a representative structure of the

culinary tourist: *experiential*, *experimental*, and *existential*. Finkelstein's assessments, although dated, remain a prominent form of segregation in contemporary tourism literature (Au & Law, 2002).

The experiential stage, as purported by Finkelstein (1989), is regarded as the least dynamic of all the modes, where the individual would initiate the experience of indigenous dining for the basis of a situational stimuli and avoid consuming the specific product upon being confronted with a similar experience. Alternately, the experimental diner would explore every aspect of regional offerings in an effort to develop a palatable selection from a choice composition (Au & Law, 2002). Finally, with the existential diner—who is noted as being the “true” culinary tourist—there apply considerations of devotion to the experience of indigenous dining and dining-related practices (Au & Law, 2002). Such an individual has been noted to seek out gastronomic or culinary activities as a primary function in evaluating a cultural experience during a tourism activity (Finkelstein, 1989).

Culinary Tourism is a term developed to describe a form of tourism in which the appreciation of regional foods and beverages are directly influential as a motivator during a tourism activity (Charters & Ali-Knight, 2002). In this regard, culinary tourism would be acknowledged as a secondary or tertiary initiative in distinguishing destination preference. It should not be overlooked however, that current literature supports the trend that the average expenditure based on this form of tourism warrants one of the most prominent forms of travel and touring expenses (Hjalager & Corigliano, 2000).

The term *culinary* encompasses cuisine as well as gastronomy; while cuisine addresses the indigenous ingredients and regional uniqueness in food preparation and etiquette, gastronomy is more the expression of quality and the inherent joy derived of eating or dining (Ignatov, 2003). Though the terms share a definitive meaning, together they offer insight into the mass appeal of the relatively modern movement—as that of a celebration of culture, an experience more so than a nutritional supplement for self-preservation (Hjalager & Corigliano, 2000). As acknowledged by the International Culinary Tourism Association (2003), in conjunction with the International Conference on Culinary Tourism (held in Victoria B.C., May 2004), nearly 100% of all tourists dine-out when traveling, and food and beverage—as a category—consistently ranks first and foremost in visitor spending, more so than even lodging; with the average expenditure on dining and dining related activities by tourists exceeding that of the domestic patron (I.C.T.A., 2004).

In an effort to designate an encompassing classification and frame what culinary tourism in-fact entails, a definition was adopted from the International Culinary Tourism Association (2004), which transcribed states that “*Culinary tourism refers to the search for prepared food or drink while in a travel context.*” Within this defining field, this unique form of tourism may stem from an urban or rural experience; acknowledging that culinary tourism is in-fact a subset of cultural tourism and should not be transposed to reflect the subject of agricultural tourism, as it is widely considered (I.C.T.A., 2004). Examples presented by the I.C.T.A. (2004) included “*restaurants, wineries, breweries and road-side stands with products like jam and honey.*”

Though the concept of culinary tourism is not new, it has recently been assessed as a viable form of economic growth (Deneault, 2002). In-light of the current literature which supports the economic viability of culinary tourism in accordance with localized economies, the Canadian Tourism Commission has initiated a national campaign in an effort to develop cuisine as a tourism product, highlighting cultural diversity and the indigenous gastronomic experiences as prominent components of destination marketing (Deneault, 2002).

In accordance with the 2001 Wine and Cuisine Report, individuals who are most likely to partake in activities associated with culinary tourism, were noted as consisting of a more affluent or mature/senior segment (Lang, 2001). This aging demographic is represented primarily by the “Baby-Boomers” (1947-1966) noted as consisting of the largest demographic component and most influential in economic stability (Swaine, 2001; Lang, 2001). In this regard, the Economic Planning Group of Ontario proposed the segmentation of this specific target market through promotional activities; acknowledging affluent young singles, affluent couples, and affluent families who exhibit an above average interest in regional gastronomy and viticulture as secondary markets (Swaine, 2001).

Alternately, Au and Law (2002) suggested three separate demographic components that assemble the typical culinary tourist: Family-lifecycle, social-class, and cultural/geographic variables. The variables associated with the family-lifecycle consist of age, marital-status, and number of dependant children. In this regard, the typical culinary tourist generally illustrates an overall lack of formal dependants, while maintaining a more mature age structure (Au & Law, 2002). The social-class variables take into account the occupational and educational influences, of which the representative culinary tourist has been assessed as sustaining a more developed educational component (Hjalager & Corigliano, 2000). Lastly, the cultural/geographic variables are consistent with “*race, region, and location of residence*” (Au & Law, 2002, p.825). In this regard, the culinary tourist has been assessed as a conventional “*same-day*” visitor, originating within close

proximity to the respective destination (Deneault, 2002). In addition, as Dodd (1995) purported, the contemporary movement towards the “mini-vacation,” such as the weekend getaway, in concurrence with the new found desire to visit rural regions, bodes an inherent compatibility with these identified traveling modalities of the culinary tourist.

To further evaluate the impact of culinary tourism, this study sought to assess a well-defined tourism destination that is equipped with culinary offerings, and to ascertain the degree in which culinary tourism has sustained within the marketable economic-base. This assessment was designed—based on the following hypotheses—to examine the economic impact of culinary tourism in response to promotional initiatives, as well to validate a demographic assessment of the typical culinary tourist.

H1: Culinary Tourism is primarily a secondary activity to the majority of visitors.

H2: Culinary Tourists are more affluent and higher-educated as compared to the typical visitor.

H3: The subsequent expenditures of the culinary tourist are of higher denomination than that of the typical visitor.

H4: Promotional initiatives in the Niagara-on-the-Lake region may require more attention in specific segments of the market.

METHODOLOGY

Primary data collection was composed via solicited one-to-one site surveys—interviewer completed; administered in the morning until late evening. Interviews were conducted in the downtown-core of Niagara-on-the-Lake during the months of August and September 2004. The duration of the analysis was designed to account for each separate day of the week, in an effort to segregate weekend tourists from weekday to assess for any significant discrepancies in expenditures.

This study focused primarily on inbound tourists to Niagara-on-the-Lake, segmenting those that partook in culinary related activities as a component of their traveling experience. This specific location was chosen based on a geographic analysis, noting that within a 150km radius (*2hr drive*) an estimated 13.1 million individuals reside (Niagara Stats, 2002). This aspect of transient availability allocated considerations of repeat visitation, not only domestically, but also internationally in regards to boarder proximity.

Prospective respondents were approached based on non-probability convenience sampling, addressing individuals who were predisposed to assist in the analysis. In an effort to achieve approximate randomness, or sustain any dynamic population inference, subjects were approached on the ‘*n*th option’ utilized to control for the inherent arbitrary nature of the selection (Lee, 2002).

The survey instrument was developed utilizing previously established economic and demographic profile inquiries (Swaine, 2001; Lang, 2001; & Lee, 2002). The specific questions sought to analyze similar economic associations between variables. Demographic and trip-specific questions—that were also adopted from the literature—were generic inquiries that were utilized for correlative purposes.

Potential respondents were required to qualify themselves in regards to age—eighteen years or older—as well, to ensure that they were indeed tourists to the specific region and not residents. Respondents were asked questions pertaining to their residence-of-origin, used to designate the basis for a geographic trading-area, illustrating any incongruence between culinary tourists and that of the generic tourist segment. Respondents were then assessed for their primary (*existential*), secondary (*experimental*) and tertiary (*experiential*) motives for visitation, segregating those that mentioned or offered reference to culinary related activities.

Individuals who illustrated an interest in culinary activities were asked questions pertaining to promotional initiatives. These questions were then utilized to facilitate an analysis regarding current levels of regional and media involvement. This process offered correlative applicability to the economic impact analysis by addressing promotional efforts in relation to current economic initiatives.

In order to assess the economic impact of culinary tourism, respondents were asked to consider their total expenditure specifically related to the Niagara-on-the-Lake region. Of that total, respondents were asked to systematically breakdown each of the following cost components: [*fine-dining; Casual-dining; Lodging; Entertainment; Shopping; Wineries; Culinary Products; Tourist Attractions; and Other*] In addition, respondents were asked a variety of standard-trip and demographic information to validate literature accounts pertaining to the nature and motivational characteristics of the typical culinary tourist.

The limitations of the assessment were relatively unavoidable when undertaking convenience-sampling. Most notably the identifiable location—downtown Niagara-on-the-Lake—could not be controlled for variances in ingress or egress specifics which directly influences representative claims (Lee, 2002). Also, in response to the location of the analysis, it was found that a considerable proportion of the culinary population, those that do not patronize the main street but sustain rural activities, may have been discarded from the sample populace. With a considerable international presence, Niagara-on-the-Lake facilitates a diverse intersection of the incoming tourist population, and as such, language proved to be a significant barrier in some instances where the survey instrument could not be completed with sufficient objective interpretation. Other limitations incurred on the basis of the allotted time of administration. The study was noted as commencing during the Shaw Festival, which may have inadvertently represented disproportionate assessments; noting that the Shaw Festival commences during peak tourism demand and spans the duration of almost half the fiscal year, and as such, warranted consideration due to a comparative demand schedule of the incoming tourist population.

RESULTS

The sample-population of 600 visitors was initially segregated, isolating the combined total of existential (primary) and experimental (secondary) culinary tourists from that of the total population. The results maintained a culinary tourist sample of $n=106$, representing 17.6% of surveyed respondents. The exclusion of the experiential (tertiary) culinary tourist was based on the discriminatory nature of their experience, which may have inadvertently contaminated any attempts to accurately attribute a persistent and/or enduring profile.

From a gender perspective, the sample population as a whole was relatively even-split. When segregated, isolating the culinary tourists, the gender differential was noted as being predominantly male (72.1%). This discrepancy, although not distinguished in reviewed literature, may be worth noting when considering the overall traveling demographics of the traditional tourist population.

With respect to the economic trading-area profile, the sample population demonstrated very little divergence in domestic and international travels, although the majority (52%) of segmented culinary tourists was that of American visitors, as apposed to the generic tourist, which recorded only 40.4% of surveyed visitations from the United States.

When considering the maturity of the respondents, the average age for a generic tourist visiting Niagara-on-the-Lake was assessed within 45-54 years-of-age, whereas the culinary tourists maintained an average age of 55-64. This difference in age structure directly verifies literature, which claims that the culinary tourist is derived of a more mature, or senior segment of the market. When addressing educational components, generic tourists tended to be fairly well educated, with 30.7% retaining a University degree, 18% with a graduate-degree, and 13.9% with a post-graduate designation. In comparison, the culinary tourists ranked proportionately higher in each of the respective categories: degree 38.1%, graduate-degree 22.9%, and post-graduate designation 19%. Altogether, 80% of the segmented culinary respondents, as opposed to 63% of the generic tourists, were documented as maintaining a university degree or above. This demographic component validates current literature, which supports that the average culinary tourist is more educated than the generic tourist population.

It has been documented that education is a primary indicator for predictive levels of affluence, which takes into account several demographic components, including income (C.T.C, 2000). The highest response category for the generic population's annual combined total household-income was within \$75,000-\$99,999 CA. For perspective purposes, 65% of the generic tourist population recorded annual incomes of \$75,000 CA or more. In comparison, the culinary tourist analysis suggests that the highest percentage of average household-income was more than \$125,000 CA. Noting a total of 84% of culinary tourists listed an average household-income that matched or exceeded annual levels of \$75,000 CA. This income distinction validates contemporary literature, which supports that the average culinary tourist is more affluent than the generic tourist population (C.T.C, 2000).

When acknowledging affluence in response to disposable income-levels and educational distinctions, it is imperative to address demographic family compositions, which proportionately affect expenditure models and disposable income assessments. Reviewed literature accounts of the family composition directly responsible for sustaining the typical culinary tourist, maintained household structures consistent with a lower-level of dependants. In comparison, the assessment of demographic components in Niagara-on-the-Lake maintained comparable findings. Findings indicated an average of fewer than three individuals per-household, in conjunction with over 80% of respondents who indicated a negligible account of dependants less-than 18 years-of-age. Although these findings validate current literature assessments, it must be noted that the generic population represented proportionate characteristics. On average there was no immediate

discrepancy between the family structure of the incoming generic tourist population and that of the segregated culinary tourists.

In an effort to address the economic impact of traveling budgetary allocations, it was essential to acknowledge the duration-of-stay in response to the segregated segments of the population. Culinary tourists were noted primarily as consisting of “same-day” visitors, usually traveling domestically or of moderate distance to the desired location. From an economic standpoint, this aspect of brief visitation has proven to be a definite challenge for promotional positioning; considering the benefit of excess pecuniary gains, though realized in moderate durations (Dodd, 1995; Charters & Ali-Knight, 2002). When looking specifically to Niagara-on-the-Lake, the culinary profile assessment held that 47.6% of the categorized culinary tourists listed a planned trip-duration of 24hrs-or-less. Although this illustration is a compelling sponsor of the “true” culinary tourist in Niagara-on-the-Lake, when weighed against the sample population, the findings illustrated a negligible account of any significant discrepancy. The likelihood for this overall short-term stay could be directly attributed to specific geographic variables, such as: Boarder-proximity, adjacent proliferating economy (e.g., Niagara-Falls), and indiscriminate residential surroundings. Although this analysis did not validate the discrepancy between segments and the previously addressed span-of-visitation, it nonetheless delivered an equitable platform to assess expenditure-models based on a comparable duration of attendance.

From a purely economic standpoint, expenditure-models illustrated that the categorized culinary tourist maintained an average group expenditure of \$795.15 per-party disbursement, compared to the generic tourist population, which demonstrated an average group expenditure of \$505.80. To control for any variance in party dynamics, the group disbursements as a whole were analyzed for individual expenditure accounts. This process offered an exclusive indication of the economic impact of an average culinary tourist (\$270.54), in comparison to that of the generic tourist (\$196.78). To further this assessment and control for aspects related to the length of visitation, individual per-day expenditure models were developed. The findings revealed that the generic tourist recorded daily expenditures in estimate of \$50, whereas the culinary tourist demonstrated an average daily expenditure exceeding that of \$100; in other-words, more than doubling that of the respective per-day amounts sustained by the generic tourist population.

Though the designated expenditure differential between the culinary and generic segments was of significant denomination, it was noted that the average fine-dining expense by the culinary tourist was more than triple that of the generic tourist, in conjunction with the average expenditure on Wineries, which almost exceeded the generic tourist by a multiple of seven. Another interesting finding, which corroborates current literature accounts, was that the allocated expenditure for culinary tourists based on accommodations, exceeded that of the generic tourist by almost 40%. Though this difference may directly reflect previously addressed disposable-income assessments, it nonetheless may offer relative applicability for the lodging industry to capitalize in areas of promotional packaging.

In respect to the economic impact analysis, respondents who reported culinary offerings as a driving factor in their traveling considerations, exceeded the average expenditure in each of the following categories: [*fine-dining; Casual-dining; Lodging; Entertainment; Shopping; Wineries; Culinary Products; and Other*]. When acknowledging culinary components (e.g., Fine Dining & Wineries), the categorized culinary tourists almost doubled the respective amounts of those who did not list food related proceedings as a substantial motivating factor.

To account for the promotional initiatives related to the previously mentioned aspects of culinary offerings, respondents recorded word-of-mouth as the driving factor in the awareness of culinary initiatives in the Niagara region. In an effort to substantiate this, a detailed menu and promotional analysis of Niagara-on-the-Lake was undertaken. Respective menus were scrutinized to develop a comprehensive inventory of all geographic and regional references. This analysis was focused primarily on culinary offerings, with the exclusion of alcoholic beverages due to the promotional saturation, which may have inadvertently distorted the accuracy of results.

When regarding regional promotion from a menu perspective, 26 local restaurant menus were evaluated in Niagara-on-the-Lake, accounting for a total of 139 culinary geographic references. The findings illustrated that only 19% of the 139 promotional references were specific to the Niagara-on-the-Lake region; promoting indigenous produce and regional gastronomy. The majority of regional references (51%) were that of international culinary products, with the remainder predominantly citing Canada as a whole, with a slight account of Provincial influence.

CONCLUSION

Regarding the purpose of this analysis, culinary tourism in the localized setting of Niagara-on-the-lake has proven to be quite substantial, not only from an economic perspective, but also in regards to prospective promotional

considerations—noting the current marginal level of endorsement. Furthermore, literature accounts of the current culinary tourist demographic composition proved relatively accurate when assessed in this localized context.

In regards to the previously stated hypotheses, the demographic validation maintained that the culinary tourists were on average more affluent than the generic tourist population. In addition, culinary tourism in Niagara-on-the-lake was sustained predominantly as a secondary initiative in destination planning. When evaluated in conjunction with the economic expenditure models, there demonstrated a consistent margin of existential culinary tourists or *foodies* who conveyed culinary activities as a primary motivator. This overall secondary allocation may be better represented in the context of promotional mediums, which also concurred with the proposed hypothesis pertaining to the degree of attention needed in areas of promotional segmentation.

In an effort to put the economic impact assessment in perspective, approximately 35% of Niagara-on-the-lake's annual transient volume is realized within the months of August and September (Thomson, 2004). This aforementioned average annual volume of incoming tourists has been assessed at approximately 3 million visitors (Thomson, 2004). Therefore, this study, which was conducted between the months of August and September, during peak tourism demand, could account for over 1 million regional visits; of which, as stated in the previous analysis, 17.6% or 176,000 could be considered culinary tourists. Of that 176,000, if per-person expenditures equated to roughly \$100 (conservative estimate), as illustrated previously, the culinary tourist segment would culminate to an economic contribution of \$17.6 million. The remainder of the tourist population, 82.4%, or 824,000, with an average per-person expenditure of \$50, would contribute \$41.2 million. Conversely, this \$41.2 million would equate to only 70% of the total economic contribution, and although culinary tourist sustain a mere 17.6% of incoming volume, their economic contribution culminates to 30% of Niagara-on-the-Lake's total annual tourism export. Moreover, at present this achievement is accomplished with minimal promotional involvement, but nonetheless affords an area of potential growth. Future considerations may warrant a cost/benefit analysis pertaining to promotional efforts.

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DESTINATION IMAGE ANALYSIS: COGNITIVE VERSUS AFFECTIVE

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ABSTRACT

Though both cognitive and affective components were recognized to be important in describing destination images, previous studies have either relied on cognitive attributes or affective attributes to explore a travel destination's image. Few efforts have ever been attempted to analyze the interactive effects of these two perspectives. This study examined the destination image of Oklahoma based on the cognitive attributes and affective attributes as well which proved to be a better way of understanding destination images. Results further showed that the two components were correlated. Further implications were discussed and recommended.

Key Words: Destination Image, Cognitive and Affective, Oklahoma

INTRODUCTION

Image is the most important aspect of a travel destination from a marketing point of view. Destinations need to project their distinctive images in order to enhance tourism appeal. Tourism destinations often compete on nothing more than the images held in the minds of potential tourists (Baloglu and McCleary, 1999). Measuring and managing destination images is a major priority for destination marketers and researchers. In order to remain competitive, destination marketers must be able to understand how tourists perceive the products and services of the destination. Understanding images held by target markets is essential to avoid moving the image into a position held by an able and strong competitor (Gartner, 1996).

Oklahoma State may not be considered as a popular destination in attracting international tourists as compared with other well-known states such as New York, California and Florida. For instance, the number of Oklahoma's annual international tourist arrivals is less than one hundred thousand. Even so, tourism has become Oklahoma's third largest industry, contributing \$3.6 billion to the state's economy annually. Being aware of the importance of its tourism industry and its great potential, the state of Oklahoma is currently launching a state-wide tourism awareness campaign - 'Tourism, Oklahoma's Newest Cash Crop', aiming to increase the awareness of Oklahoma's tourism among its economic leaders and people and to enhance its competitive edge in both the domestic and international travel markets. It is suggested that, prior to actual promotions or other marketing activities in the international travel market, it is necessary for Oklahoma to identify its destination images.

With respect to destination image analysis, previous studies have witnessed some discrepancies as which image component should be focused on in order to explore a real destination image. For instance, Echtner and Ritchie's (1993) extensive literature review of tourism destination image measurement revealed that image constructs have been limited to studies dealing with perceptual or cognitive components, where objective attributes or features of destinations were used as a basis for measuring destination images. Williams et al. (1992), however, suggest that a place is probably best understood by focusing on its symbolic meaning rather than on the sum of its physical attributes. Ko and Park (2000) suggested that what a tourist is consuming or experiencing may not be a destination (cognitive); it may represent the symbolic meaning (affective) with the destination. These arguments emphasized the importance of identifying either the cognitive (objective, physical) image, or the affective image (symbolic, psychological), but failed to tell the interactive relationship between these two image components.

Thus, the purpose of this study was to study Oklahoma's destination image from both the cognitive and affective perspective. Specifically:

- 1) to examine Oklahoma's cognitive and affective image attributes together;
- 2) to explore the relationship between these two image components

LITERATURE REVIEW

Given the importance of destination image study, this topic has been a popular topic discussed by many tourism researchers (Gunn 1972, Crompton 1979, Lew 1987, Embacher and Buttle 1989, Reilly 1990, Schiffman and Kanuk 1994, Gartner 1996). Gunn (1972) defined images as being formed either on an induced or organic level. He argued that organic images are formed as a result of exposure to newspaper reports, magazine articles, TV reports, and other non-tourism specific information sources, while induced image formation is a function of the marketing and promotion efforts of a destination area. While little can be done to influence organic image, marketers can induce an image by investment in promotion (Gunn 1988). Crompton (1979a) defined image as the sum of beliefs, impressions, ideas, and perceptions that people hold of objects, behavior, and events. Phelps (1986) contended that images are formed on two levels, primary and secondary. Secondary image formation results from any information received from another source. Primary image formation results from actual visitation. Fakeye and Crompton (1991) further pointed out that destination image is conceptualized as evolving from an organic image, through an induced image, to a complex image.

According to Gartner (1996), "destination image(s) are made up of three distinctly different but hierarchical interrelated components: cognitive, affective, and conative. The interrelationship of these components ultimately determines predisposition for visitation" (p. 457). Based on Gartner's view, the cognitive component is derived from fact and may be viewed as the sum of beliefs and attitudes of the object leading to some internally accepted picture of its attributes (external forces, pull attributes). Affective images are tourists' internal or psychological feelings towards the perceived benefits of destination visitation; it has a close relationship to tourists' motivations. The affective component of image is related to motives in the sense that it is how a person values the object under consideration (internal forces, push attributes). It was considered that people travel because they are pushed into making travel decisions by internal forces and pulled by external forces of the destination attributes (Crompton, 1979a, Dann, 1977). After processing external and internal stimuli about a destination, a decision is made whether or not to travel to the area.

According to Stabler (1988), "there is some controversy among researchers, whether the choice of tourist trip is person-determined or destination-determined. This uncertainty reflects lack of empirical evidence on the role information plays in the creation of image," (pp. 134-135). This study assumed that an interactive correlation existed between the cognitive image component and affective image component. Hence, one hypothesis was developed to test the relationship between these two components. The null and alternative hypotheses were stated as follows:

Ho: There are no significant relationship between the cognitive image components and affective image components;

Ha: There are significant relationship between the cognitive image components and affective image components

RESEARCH METHOD

This study used a descriptive research method, aiming to explore and identify the image dimensions of Oklahoma as perceived by international tourists from the perspectives of both cognitive and affective components. The questionnaire was designed and used for data collection. The questionnaire consisted of six sections, including respondents' socio-demographic profiles, visiting characteristics, cognitive image attributes, and affective image attributes, etc. In the section of cognitive attributes, previous destination image studies (Echtner and Ritchie 1991, Phelps 1986 and Gartner 1989) were referenced. Related publications and promotional brochures on Oklahoma's tourism attractions were reviewed. In the section of the affective attributes, respondents were asked to rate their level of agreement to the affective image attributes using a five-point Likert scale ranging from "strongly disagree - (1)" to "strongly agree - (5)". In creating a list of affective image attributes, the affective image items used in previous tourism image studies (Crompton, 1979b, Dann, 1977) were referenced. An interview was conducted with some of OTRD marketers and researchers in charge of Oklahoma's tourism promotion. As a result, 27 cognitive items and 22 affective items were selected to depict Oklahoma's destination images. A pilot test was also conducted to examine the content validity and reliability of the questionnaire before the survey was undertaken.

The questionnaire was developed in English, and then translated into German, French, and Spanish. The questionnaires were distributed to the international tourists visiting Oklahoma through its 12 Welcome Centers. Due to the unknown nature of the international tourists visiting Oklahoma, a convenience sampling was employed to collect the data. The survey started from August 2002 and was eventually concluded at the end of November. As a result, 202 usable questionnaires were obtained.

Data was entered into the Statistical Package for Social Sciences Windows Version 10.0 (SPSS) program and analyzed accordingly. A frequency analysis was conducted for the questions in the questionnaire to examine the distribution

of the responses. Mean ratings were computed for the perceived cognitive and affective image attributes. Factor analyses were used to group the cognitive and affective image attributes into two separate smaller sets of dimensions. Canonical correlation analysis was conducted to test the relationship between these two sets of dimensions.

RESULTS

The respondents' profile indicated that the majority of respondents were male (61.5%). In terms of age, the main age groups were those between 41 and 50 years (22.2%), 31-40 years (20.2%), and 51-60 years (19.7%). The majority of respondents were first time tourists (61.2%). And most of them were pleasure tourists (55.8) and VFR (visiting friends and relatives -18.6%).

The results of factor analyses of cognitive and affective attributes were presented in Tables 1 and 2 (omitted), respectively. Table 1 showed that six cognitive dimensions comprising 26 saliently loaded items emerged from the analysis which, accordingly, were labeled as 'cultural attractions'(F1), 'traveling conditions'(F2), 'outdoor recreations'(F3), 'peculiar landscape'(F4), 'local attitudes'(F5), and 'nightlife/shopping'(F6). The factors explained 68.20% of the variance with eigenvalues ranging from 1.14 to 9.50. The Cronbach's alphas for the six factors range from 0.746 to 0.885. Factor 6, 'local attitudes', obtained the highest summated mean score of 4.27. Factor 2, 'natural attractions', obtained the lowest summated mean score of 3.56.

Table 2 indicated that, for the 22 affective attributes, six factors were extracted and chosen to represent the affective attributes, namely, "Relaxation", "Novelty Seeking", "Sports/keep-fit", "Prestige Seeking", "Safety/benefit Seeking", and "Thrills/adventures". In terms of these factors' summated mean scales, Factor 2, "Novelty Seeking", obtains the highest mean scale of 4.02. The second highly rated factor is Factor 1, "Relaxation"(3.94), followed by Factor 4, "Prestige Seeking"(3.86), Factor 6, "Thrills/adventures"(3.71), and Factor 5, "Safety/benefit Seeking"(3.64). The factor with the lowest mean scale is Factor 3, "Sports/keep-fit" (3.42).

Table 3
Overall Results of Canonical Correlation Analysis between Affective and Cognitive Dimensions

Variate Number	1	2	3	4	5	6
Canonical correlation	0.824	0.610	0.443	0.352	0.160	0.141
Eigenvalue	2.11	0.59	0.24	0.14	0.026	0.020
Canonical R Square	0.679	0.372	0.196	0.124	0.026	0.020
F-Value	9.32	5.18	3.55	2.77	1.58	2.78
Significance (P<)	0.001*	0.001*	0.001*	0.004*	0.179	0.099
(%) of variance traced:						
Affective dimensions	54.28	10.98	9.17	9.15	10.66	5.76
Cumulative (%)	54.28	65.26	74.43	83.58	94.24	100
Cognitive dimensions	55.23	10.83	8.69	7.50	9.25	8.49
Cumulative (%)	55.23	66.06	74.75	82.26	91.51	100
Redundancy (%):						
Affective dimensions	36.84	4.08	1.80	1.13	0.27	0.11
Cumulative (%)	36.84	40.93	42.73	43.86	44.13	44.25
Cognitive dimensions	37.49	4.03	1.70	0.93	0.24	0.17
Cumulative (%)	37.49	41.52	43.22	44.15	44.39	44.56

Note: Significant at the level of 0.01.

Canonical correlation analysis was employed to determine the nature and magnitude of the relationship between the two sets of image components. The criterion (dependent) variables were the six affective factors. The predictor (independent) variables were the six cognitive factors. As shown in Table 3, this canonical correlation analysis resulted in four canonical functions significant at the level of 0.01. About 83.58% of the variance of the affective factors and 82.26% of the variance of the cognitive factors could be traced by the four functions. The redundancy index indicates that about 43.86% of the variance of the affective factors was explained by the cognitive factors, and 44.15% of cognitive factors was accounted for by the affective factors. This indicated that cognitive and affective image dimensions were closely interrelated. Thus, the null hypothesis that "there are no significant canonical correlations between cognitive image

attributes and affective image attributes” was rejected and the alternative hypothesis was accepted. In other words, there existed an interactive relationship between the two destination image components.

DISCUSSIONS AND CONCLUSION

In terms of the cognitive image dimensions, the factor of ‘local attitudes’ got the highest ratings (summated mean of 4.27). The ‘cultural attractions’ factor ranks second in terms of summated mean ratings (3.91), which is very close to 4 indicating respondents’ positive agreement on its attractiveness. This factor did not obtain a higher mean score as expected. This may be partly because that the attributes representing this dimension are not the most attractive or distinctive features representing Oklahoma’s image or at least they may not be solely belonged to Oklahoma. One implication might be that a comparison study needs to be conducted with other mid-western states in terms of native American attractions. Stabler (1988), Gregory (1989) and Shaw and Williams (1994) suggested that places may project distinctive images as a reflection of the uniqueness of their specific local environment, culture and economy. However, travel consumers prefer destinations with strong and salient images (Woodside and Lysonski 1989). Other dimensions’ summated scales are just a little bit higher than the neutral point of 3, showing that the respondents have not given a highly positive consideration of the attractiveness of other dimensions.

With regards to Oklahoma’s affective images, comparatively, international tourists had a moderate perception of Oklahoma in terms of its entertainment, sport attractions, and good for value. This indicates that it could be difficult for Oklahoma to establish an image of entertainment, and/or sport attractions. Moreover, price is an important element in tourists’ perception of destinations’ image. According to the Texas Economic Development (2003), the major influencing factors for Canadian’s vacation travel to the USA were safety and familiarity, and lower costs. Findings of this study indicate that, like cognitive images which have been widely discussed in previous destination image studies, affective image components also play an important role in tourists’ perception of destination image. Considering that affective image is tourists’ psychological feelings towards a destination derived from and based on their cognitive perceptions, the affective image analysis is much helpful in exploring a destination’s complex image. It is suggested that future destination image studies incorporate affective components which would make destination images more complex and comprehensive.

The result of canonical correlation analysis showed that the two sets of image dimensions are highly and significantly correlated. This indicated that respondents’ perception of destinations’ cognitive image could be largely reflected from their perception of destination’s affective image, and vice versa. The finding of this study was consistent with the study of Uysal and Jurowski (1994) which examined the nature and extent of the reciprocal relationship between push and pull factors for pleasure tourism and found that there was a relationship between these two sets of variables. One important implication of this finding was that, instead of using either cognitive image component or affective image component in describing destinations’ image, tourism researchers and marketers are recommended to apply both cognitive and affective dimensions to examine and identify destinations’ overall image, since a cross-examination of both cognitive dimensions and affective dimensions can help researchers and marketers have a complete and better understanding of visitors’ perceptions.

In conclusion, prior to this research, the state of Oklahoma has hardly caught researchers’ attention in terms of its destination image. This study represents an initial attempt in examining its images. Data collection from international tourists proved to be a big challenge for researchers since international tourists to Oklahoma were still quite few at this stage. This study can serve as a foundation for further research in terms of Oklahoma’s destination image study. The identification of Oklahoma’s destination images would help local tourism marketers form a better understanding of its marketing position and therefore appropriate marketing strategies can be made in attracting international tourists.

There is one shortcoming which needs to be mentioned for this study. Due to the wide dispersion of the respondents’ demographic data such as respondents’ ‘country of origin’, an expected image difference analysis across major market segments (i.e. Germany, Canada, the United Kingdom, and Mexico) has not been able to be conducted. Possible image differences among major market segments remain unidentified. Given that tourists from different countries and cultures may have different perceptions, further research is recommended to focus on specific market segments and identify their respective perceptions. Besides, due to the current small population of international tourists, a convenience sample is used instead of random sampling, besides, the sample size is not big enough, there is no attempt to generalize the findings unless they are further evidenced by further studies based on a considerably larger sample.

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COLLABORATIVE DESTINATION MARKETING: A THEORETICAL APPROACH

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ABSTRACT

Destination marketing has been a challenging task for most of the tourism organizations representing the destination owing to the fragmented nature of the tourism stakeholders who are involved in the marketing efforts, and collaborative marketing could provide solutions to this challenge. This paper develops and validates an integrative theoretical framework in an attempt to explore the nature and dynamism of collaborative marketing efforts at the destination level. Implications are provided and discussed from both practical and theoretical perspectives based on the study results.

Keywords: destination marketing, collaboration, alliances and networks.

INTRODUCTION

For many years, the difficulty and complexity of tourism destination marketing have been highlighted by the fact that the marketing task is characterized by the fragmented nature of the tourism stakeholders who are responsible for components of the total offer, and that destination products are usually marketed and sold in the market place in bits and pieces by a variety of individual suppliers that operate independently (Laws, 1995; Gunn, 1988). In an increasingly competitive marketplace, the ability to create greater levels of awareness of the destination to the potential markets through collaborative efforts may give advantage to a destination. Despite the potential advantages of collaborative destination marketing, adequate attention has yet been given to this field of study either from a practical or theoretical perspective. The purpose of this study is to examine the nature and dynamics of collaborative destination marketing. In particular, the purposes of the study are: 1) To identify the preconditions which may facilitate the formation of destination marketing alliances; 2) To identify the motivations for tourism stakeholders in a destination to form marketing alliances; 3) To examine the developmental processes of collaborative marketing relationships; and, 4) To assess the outcomes of destination marketing alliances.

THEORIES ON INTER-ORGANIZATIONAL RELATIONS

A review of the literature indicates that researchers generally approach collaboration investigations using one of three units of analysis: the organizational, the interorganizational dyad, or the interorganizational network. Accordingly, different theoretical paradigms have been used to study interorganizational relations at various levels, among which, resource dependency theory, transaction cost theory, strategic management theory, and networking theory are the most commonly used ones. However, each of the theoretical paradigms has its own limits in truly reflecting the nature of collaborative relationships in the tourism industry. For example, most literature on resource dependency focuses exclusively on the dyadic relationships between the alliance partners. As a matter of fact, tourism alliances and networks should be looked at in a whole networks of relationships, rather than in isolation from the rest of the exchanges by the involved organizations. The standard transaction cost analysis (Williamson, 1975) is essentially a single-party analysis of cost minimization. Indeed, tourism marketing alliances and networks are not only about cost minimization but also about joint value maximization. Though it seems that a strategic perspective can to a large extent explain why the tourism organizations enter into marketing alliances and networks, much research in this area has focused on the motivational aspects of strategic alliances, and less attention has been given to the dynamic and developmental process aspects (Thomas and Trevino, 1993). Similarly, the networking approach has tried to understand how agencies coordinate and integrate their activities (Provan and Milward, 1995), this approach mainly focuses on the uncertainty of the process and is not very useful and powerful in explaining the purposeful marketing alliances and networks of the tourism organizations in a destination.

An Integrative Framework of Collaborative Destination Marketing

It is posited that an integrative approach should be used to explain the tourism organizations' behavior in forming marketing alliances and networks, thus contributing to further theory development. Based on the research questions, the

results will be summarized by four major constructs in an attempt to provide a solid theoretical foundation for describing the nature and dynamics of collaborative destination marketing alliances: 1) the precondition construct which delineate the economic, social, and environmental conditions for alliance and network formation; 2) the motivation construct which attempts to explain why organizations choose to enter into strategic alliances and networks to achieve their specific goals; 3) the process construct which captures the dynamic stages of collaborative marketing processes; and, 4) the outcome construct which attempts to delineate the consequences of the collaborative marketing activities.

RESEARCH METHODOLOGY

Given the exploratory nature and process investigation of the study, a qualitative research paradigm was deemed appropriate to the context of the research goals in the study. This study used personal interviews of representatives from both the convention and visitors bureau and local tourism industry in a destination. Elkhart County in northern Indiana was selected as the venue for the study because of its rich and diverse tourism products, active collaborative marketing activities among the tourism industry at various levels, and a diverse representation of tourism stakeholders. In order to address the research questions, interviews of representatives from both the Elkhart CVB and the local tourism industry were used. In this study, five members from the CVB were interviewed individually. Representatives from the local tourism industry were also interviewed to elicit their opinions in relation to their collaborative marketing experiences both with the CVB and other tourism industries within the destination. Based on consultation with the CVB, four different sectors of the local tourism industry were included in the study: 1) accommodation; 2) attractions; 3) cultural, arts and event organizers; and 4) retailers. From each of the four sectors, eight individual tourism businesses as representatives were selected for interview. Interviews were conducted by the researcher at the interviewees' office and their responses were audio-taped for data analysis. The data analysis process follows that set by Miles and Huberman (1994) consisting of three concurrent flows of activity: data reduction, data display and verification.

RESEARCH RESULTS

The study reports the results of the interviews using the following themes: 1) preconditions for destination marketing alliances; 2) motivations for entering marketing alliances; 3) stages of marketing alliance formation; and, 4) the outcomes of destination marketing alliances.

Preconditions for Destination Marketing Alliances

Interviews with both the CVB staff and the local tourism industry representatives indicate that the following factors are pronounced as preconditions for destination marketing alliances in the tourism context: crisis, economic condition, competition, organization support, and technology support. The interviews revealed that crisis is one of the most important and typical preconditions for the local tourism organizations to form collaborative relationships, especially when the crisis requires collective action. Economic condition was also found to be one important factor which establishes the preconditions for collaboration. Another important precondition for collaboration relationship development is related to the increasing competition in the marketplace. Under such circumstances, tourism organizations tend to work with each other and pull resources together in order to achieve something which they could not achieve simply by individual efforts. Many representatives indicated that organizational support of various types serve as a very important precondition for them to enter alliance relationships with others. The interviews revealed the following factors as important organization support for collaboration: leadership, attitude, communication, resources, and competency.

Motivations for Entering Marketing Alliances

Tourism businesses enter into collaborative relationships with different motivations, and these motivations can be classified into the following broad categories: strategy related, transaction cost related, learning related, cluster competitiveness, and corporate social responsibility.

Strategy-related Motivations. In the tourism context, expanding markets and developing products portfolio for the local destination are important motivations for the CVB and the local tourism industry to work together for marketing activities. From the industry perspective, they believe that increasing the portfolio of product offers will not only provide consumers more opportunities to choose from but will also make it possible for them to stay longer so that everybody has the potential to benefit. Many industry representatives stated that keeping a good working relationship with the CVB is critical for the competitiveness of the local destination as a whole as well as for their own survival. They understand that working together and providing the holistic experience to consumers is the only way to make the destination more competitive and sustainable in a long term. It is also agreed that networking with each other is a good way to enhance the entire community for better economic gains.

Transaction Cost-related Motivations. The driving force in transaction cost related motivation is efficiency, with emphasis on providing incentives for efficient transactions and economizing on transaction costs. In a tourism destination context, it appears that efficiency and effectiveness are two of the factors driving the CVB and the local tourism to work together. One CVB interviewee interpreted this way, "...from the CVB perspective, we are able to do so much more when we work with others..." This view was also shared by the tourism industry representatives.

Learning-related Motivations. It was found from the interviews that both the CVB and the tourism industry want to work with each other for learning purposes, such as expanding their own capabilities and getting a broad knowledge base. From the CVB's perspective, the more information they have at their fingertips, the more useful they think they would be either to the external constituents or to the local community. The same view was shared by the local tourism industry. From their perspective, the more they work with each other, the more they would understand the local businesses related to them, the opportunities which are available, and possibly identify good partners to work with. In addition, most of them believe that CVB has the knowledge base and expertise they need, and the process of working with the CVB is a learning process itself.

Cluster competitiveness. Clusters are viewed as encompassing an array of linked industries and other entities important to competition. One implication of cluster theory is that tourism industries in a destination can provide complementary travel products and services and offer a holistic experience to travelers. These complementarities come in many forms, with the most obvious being when products complement one another in meeting customer needs. For example, the quality of a tourist's visit to the tourism cluster in a destination is reliant upon the quality and efficiency of complementary businesses such as accommodations, attractions, retail outlets, etc. This view was shared by quite a number of local tourism businesses.

Corporate Social Responsibility. Sometimes organizations enter collaborative relationships in order to address a certain community issue or public concern. Because the mission of the CVB is generally linked more directly to addressing society issues than are the missions of other for-profit counterparts, this might seem to be an obvious motivational component of the CVB participation. Another aspect of the social responsibility framework is the goal of increasing goodwill in the community. In such a case, an organization may establish itself as a member of an alliance to enhance its reputation with its consumers and local constituents. By participating in the alliance, the CVB can demonstrate to the community that it is concerned about and active in responding to the tourism stakeholders' hopes and expectations.

STAGES OF MARKETING ALLIANCE FORMATION

From the interviews it seems that there is no distinct demarcation of the different stages of the collaboration process, and many things are intermingled with each other. However, some general stages can be identified to describe the collaboration process from the very beginning to the very end. These general stages can be divided into five: the assembling stage, the ordering stage, the implementation stage, the evaluation stage, and the transformation stage.

Assembling Stage. It is revealed from the interviews that the first stage of alliance formation is assembling. During this stage, potential partner organizations come together to explore the possibility of an alliance. Since the assembling stage represents the very beginning of the collaboration process, two major issues are identified as important at this stage: issue identification and partner selection. Issue identification means that the partners need to find the problems they need to work on collectively. It is revealed from the interviews that the idea generation for possible collaborative projects comes from different sources, such as brainstorming through business meetings, organization's employees and customers, as well as the best practices which they can benchmark with. Once the issue has been identified, another important aspect in the assembling stage is related to partner selection, that is, who should be included in the partnership relationship to carry on the project. Several criteria have been identified as of paramount importance in the partner selection process. First, the partners selected for collaboration have to be those who share the same domain and common goals. In a quite similar vein, the tourism industry expressed their criteria for partner selection based on the partner's capability and reputation. In addition, level of interdependence or complementarity plays an important role in partner selection. It is also found that mutual benefit sharing is another important factor for partner selection. Consistent with networking theory, it is also revealed that partners are sometimes selected by taking advantage of the existing relationships they already have.

Ordering Stage. The purpose of the ordering stage is to align all the resources and make sure that everything is geared towards successful co-marketing activities. This stage starts with the research efforts about the opportunities and issues identified in the assembling stage, to have a closer look at the issues and opportunities in terms of their applicability/feasibility and value. This research stage is expected to streamline and sort through the ideas generated in the initiation stage and contribute to arriving at shared vision among all the parties involved so that they agree on what actions

should be taken. After the opportunities have been examined and shared vision has been reached, the next step is to formalize the relationships, find out the possible solutions to the problems in concern and develop executable programs. It is suggested from the interview that the leader at this stage must now aid members in establishing norms for conflict management and creating mechanisms for determining the new rules and regulations as they relate to the tasks necessary to achieve the alliance's purpose. Systems that provide for the distribution of resources generated by the alliance, the flow of information, and task evaluation must also be discussed and decided on at this time.

Implementation Stage. It is reflected from the interviews that implementation is a very important stage in the collaboration process, since this is the stage in which ideas and programs are put into action. At this stage, the alliance leaders and members understand clearly the costs and benefits of membership, their new roles, and how they fit into the larger context. They also agree to place a higher value on the good of the alliance than solely on the benefits to their own constituencies. Many issues are involved in this stage, but several of them strike out as the most vital steps from the interviews. First, roles have to be assigned both with the organization and between the partners so that responsibilities are clear and expectations are well defined. Second, in order to implement the collaborative projects successfully, both parties have to make commitments to direct all the possible resources and other means so that the collaboration efforts are carried out successfully. Third, communication is also vital in this stage since everyone involved needs to understand what to do and how to do it. Oftentimes, the communication is carried out in written form so that everybody knows what needs to be accomplished and by when.

Evaluation Stage. Evaluation is another important stage in the whole collaboration process for most of the organizations involved, especially larger organizations or businesses. Obviously, evaluation takes a retrospective perspective and assess whether the predefined plans or goals have been reached. From the CVB interviews, it is revealed that revising the business plan and checking the predefined objectives are two major strategies they utilize in the evaluation process, and the result of the evaluation is always presented in writing so that they have a record to refer to if necessary. From the industry perspective, their responses to evaluation vary depending on the nature of the project as well as the size of the organization. It is revealed from the interview that large businesses are more likely to evaluate the successfulness of the collaboration project than their smaller counterparts. Many small businesses claimed that they either do not go through the evaluation process at all or they do that in a very informal way.

Transformation Stage. In the transformation stage, members in an alliance determine the future direction of their relationships after a certain marketing project is completed. Different scenarios were reflected throughout the interview and different terms were used to describe the evolutionary process. The following themes appear repeatedly as the outcome of the transformation process: evolve into stronger partnerships, spawn other projects, continue the same, continue in different forms, and finish completely. It seems that the overwhelming trend is that most of collaboration efforts evolve into stronger partnerships or generate more projects. One industry representative said: "We end up doing more, and we end up working with others more. We just move on and it doesn't seem like it ever ends. It's an ongoing relationship with different projects and events." This view was confirmed by another representative: "It usually gets better and better. The level of trust and the level of relationship get stronger and better."

OUTCOMES OF DESTINATION MARKETING ALLIANCES

The interview reveals that collaboration outcomes are usually multi-faceted and contingent upon the problem issue of the collaboration and the context in which the collaboration takes place. It is confirmed from the interview that there are three broad categories of outcomes resulted from the collaborative marketing efforts: strategy-oriented, learning-oriented, and social capital-oriented.

Strategy Oriented Outcomes. Such outcomes become visible when the perceived strategic benefits are derived through collaboration, such as sharing destination marketing costs, more effective use of the pooling of the resources of tourism stakeholders, increased destination competitiveness through cooperative branding and image building, increased and integrative tourism products portfolio, etc. Interestingly, both the CVB and industry representatives expressed similar views on this. As described by the CVB director: "By working together, we are able to accomplish much more, we can talk to a number of segments of the market." This cost efficient view was also shared by many industry representatives. Others understood the issue from a customer service and image building perspective. One restaurant manager said: "We have been able to maintain some good relationships with the hotels and create packages for individual customers, and that would just provide better services to our customers." Another one added: "It gets your name out there, and giving the community a better image. It makes the community look better, and if the community is better it will help us."

Learning Orientated Outcomes. Collaborative destination marketing usually involves a range of stakeholders, and

the parties who are directly affected by the issues bring their knowledge, attitudes and other capacities to the collaborative marketing efforts which in turn introduce change, improvement, and innovation through learning process. This view was shared widely by both the CVB and tourism industry representatives. From the CVB perspective, collaboration resulted in leaning to understand the local tourism business, the people skills and communication skills as well as problem solving skills required for collaboration. For the individual tourism businesses, learning through collaboration is a major factor and most of them realize the importance of learning through collective activities. This view was typified by one representative: "Schooling only goes so far, and you learn a lot from working with other people."

Social Capital Oriented Outcome. Besides achieving strategic goals and organization learning through collaboration, the relationship building process and the value of these relationships created in the destination is another direct behavioral outcome out of collaboration. This is usually referred to as social capital or relational capital. Here social capital refers to the resources available in and through personal and business networks. These resources include information, ideas, leads, business opportunities, power and influence, emotional support, even goodwill, trust, and the spirit of cooperation. It seems that nearly all the tourism businesses realize the importance of social capital for their businesses. They understand that social capital, like human capital or financial capital, is productive: it enables them to create value, get things done, achieve their goals, fulfill their missions, and make the destination more competitive.

CONCLUSION AND IMPLICATIONS

For tourism research, studies of inter-organizational collaboration appear to be particularly relevant at a time when public, private and, to an extent, voluntary sectors are increasingly forging partnership arrangements to market and promote tourism products in destinations. In addition, tourism as a social and economic system is ideally suited to the development of partnership given the range and diversity of organizational and community interests and involvement. It is, therefore, surprising that theories of inter-organizational collaboration and partnership have received scant attention in the tourism and organization studies literature, though some anecdotal work has been done in relation to planning for tourism development (for example, Gunn, 1988; Inskeep, 1994), and no work on the nature and dynamics of collaborative marketing in a destination has been explored. This study has attempted, in part, to fill this gap in that it explained some of the most important issues related to tourism marketing alliance formation process within a destination, such as the precondition to alliance formation, motivations for tourism organizations to enter marketing alliances, the stages of marketing alliance formation process, and the outcomes of collaboration. It is expected that the results of the interviews with both the CVB and tourism industry representatives will provide strong theoretical foundation and practical guidance for marketing alliance development in the tourism context.

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RESTAURANTS AND FOOD ALLERGIES: A DANGEROUS RECIPE

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ABSTRACT

Liability issues regarding serving food that causes an allergic reaction and injury are discussed, including the duty to warn of potentially allergenic ingredients. A duty to warn of the presence of certain allergens may exist, while, in other situations, no requirement to warn exists. Consuming foods that cause injuries from allergic reactions raise the following questions: Did the consumer ask if the food contained an allergen, what was the restaurant response, did the restaurant have an obligation to provide a warning, whether a warning was actually given, and the adequacy and accuracy of any warnings that were provided.

Key Words: Defective food, Allergies, Warnings, product liability

INTRODUCTION

It has been estimated that over 11 million people are allergic to some food ingredients and that during the course of a year, 30,000 people suffer allergic reactions to food and up to 250 die from food allergies. While restaurants and food service establishments serve millions of meals per day every day of the year in the United States. Many people who have an allergy to some food product also eat in restaurants. This paper will discuss liability issues regarding the serving of food in restaurants that causes an allergic reaction and subsequent injury to a customer, including the very complex area of the duty to warn customers of potentially allergenic ingredients. In some instances, there may a duty to warn the customer of the presence of certain allergens, while in other situations no requirement to warn exists. Injuries that result from eating foods that cause an allergic reaction almost always raise the questions of whether the consumer asked if the food contained an allergen, what was the response of the restaurant to the customer's questions, whether the restaurant had an obligation to provide a warning to the customer even if the customer did not inquire, whether a warning was or was not actually given to the customer, and the adequacy and accuracy of any warnings or statements that were provided.

The following case illustrates the dilemma facing owners and operators of restaurants and fast food chains. The case is representative of the dangers of serious injury that can result by ingesting food containing ingredients to which one is allergic and involves a restaurant customer who is injured by consuming food that contains ingredients to which they are allergic. In Brown v. McDonald's Corporation, 101 Ohio App. 3d 294; 655 N.E.2d 440; (1995). the court was presented with a question concerning whether a duty exists to warn the customer of an ingredient that subsequently caused an allergic reaction. Susan Brown bought a McLean Deluxe hamburger at a McDonald's and very soon after her meal, she developed a rash, a tight chest, blue lips, and hives. She immediately went to the hospital for emergency treatment. ... She alleged that a "seaweed-derived ingredient in the McLean caused Brown's severe reaction. They alleged that the defendants knew, or should have known, that consumers could have such a reaction, but had failed to warn Brown of the presence of this ingredient and of the risk it posed." p. 296.

This paper will focus on the question of whether a product may be considered to be defective if it is determined that the consumer should have been warned that the product contains an ingredient to which the customer is allergic. An analysis will be made of when a warning is necessary and when a warning is not necessary. And if a warning of the presence of allergens is required, the adequacy and type of warning necessary will also be reviewed. The new federal Food Allergen Labeling and Consumer Protection Act of 2004 will also be discussed. While the Act does not apply to restaurants, the Act may influence future court decisions involving restaurants, allergic reactions and the duty to warn.

ALLERGIC REACTIONS TO FOOD ALLERGIC

The Food Allergy & Anaphylaxis Network (FAAN), a national organization states: "A food allergy is an immune system response to a food that the body mistakenly believes is harmful. Once the immune system decides that a particular food is harmful, it creates specific antibodies to it. The next time the individual eats that food, the immune system releases massive amounts of chemicals, including histamine, in order to protect the body. These chemicals trigger a cascade of allergic symptoms that can affect the respiratory system, gastrointestinal tract, skin, or cardiovascular system." There is no cure and avoiding the particular food is the only way to prevent an allergic reaction. Unless you have an allergy to a food ingredient, you may be surprised by the extent and dimensions of food allergies. The United States Congress recently enacted the Food Allergen Labeling and Consumer Protection Act of 2004, and made the following findings: "Of the

estimated 11 million people in the United States who suffer from food allergies, 90 % of them are allergic to either milk, eggs, peanut, tree nut, fish, shellfish, soy or wheat. ...Approximately 2 percent of adults and about 5 percent of infants and young children in the United States suffer from food allergies; and each year, roughly 30,000 individuals require emergency room treatment and 150 individuals die because of allergic reactions to food."

A REVIEW OF GENERAL PRODUCT LIABILITY

While most liability issues revolving around serving defective food to customers are fairly well established and developed, the issues of legal liability for serving food to people who are allergic to the food is an emerging area that requires further study. Both the Restatement (Second) of Torts (1965) and the Restatement (Third) of Torts: Products Liability (1998) contain widely adopted provisions on the liability of a seller who sells defective products to a customer. A restaurant is generally responsible for any injuries incurred by a person who consumes a defective food product served to them by the restaurant.

GENERAL REVIEW OF FOOD PRODUCT LIABILITY AND THE DUTY TO WARN

Strict Liability and the Restatement (Second) of Torts

While the Restatement (second) (1965) has been replaced by the Restatement (Third) of Torts: Products Liability (1998), it is useful to review the major provisions of each. In addition, the comments and notes continue to provide insight and clarification. Section 402A of the Restatement (second) imposed strict liability upon the seller if the product is defective and if the product causes injury. Section 402A states: "One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer..." even if "(a) the seller has exercised all possible care in the preparation and sale of his product." p. 348.

A Seller of a food product may be held strictly liable for injuries caused by serving defective food. We normally think that defective foods are foods that contain a foreign object (glass in a tuna sandwich) or food that is in some way contaminated. However, a food product may be considered to be defective based upon an obligation placed upon the seller to provide a warning of danger to customers and if either the warning was not made or is deemed to be inadequate.

Comment J, of Section 402A states that "a product, although faultlessly made, may nevertheless be deemed 'defective' under the rule and subject the supplier thereof to strict liability if it is unreasonably dangerous to place the product in the hands of a user without a suitable warning and the product is supplied and no warning is given." p. 353.

The Restatement Second may impose an obligation upon the seller of food a duty to warn customers of a product being unreasonably dangerous as a result of containing an ingredient that may cause an allergic reaction. Warnings need not be given for "common allergies", while warnings must be given when a product contains ingredients "to which a substantial number" of people are allergic. A warning would also be necessary if the consumer "would reasonably not expect to find in the product." p 353 Comment J Section 402A of the Restatement (Second) of Torts.

While the comments are always intended to clarify, they leave many questions unanswered for the restaurant owner. What is a "common allergy", what products contain an ingredient where a "substantial" number of people are allergic, is the dish one that contains a common allergen but where the customer would not "expect to find it" in that dish, etc.? When is a warning necessary, and when is it not necessary? And if a warning is given, what type of warning must be given? When one attempts to clarify the obligations and duties regarding allergens, the comments often raise more questions than they answer.

Strict Liability and Sec 1, 2 and 7 of the Restatement (Third) of Torts: Products Liability

The Restatement (3d) (1998) replaces Section 402A of the Restatement (2d) and seeks to clarify some of the ambiguities of Restatement (2d) by providing separate definitions and standards for liability on the basis of manufacturing, design and warning defects. Mitchell, (2001) p. 576. It is important to note that both the Restatement (second) and the Restatement (Third) contain provisions for strict liability for the sale of defective food products. Section 1 of Restatement (3d) establishes liability for selling a defective product: "One engaged in the business of selling or otherwise distributing products who sells or distributes a defective product is subject to liability for harm to persons or property caused by the defect."

Sec 2(a) of the Restatement (Third) of Torts: Products Liability imposes strict liability for injury resulting from the sale of defective products, including the duty to warn. Sec 2(a) states:

A product is defective when, at the time of sale or distribution, it contains a manufacturing defect, is defective in design, or is defective because of inadequate instructions or warnings. A product...

(c) is defective because of inadequate instructions or warnings when the foreseeable risks of harm posed by the product could have been reduced or avoided by the provision of reasonable instructions or warnings by the seller or other distributor, or a predecessor in the commercial chain of distribution, and the omission of the instructions or warnings renders the product not reasonably safe.

Section 7 imposes strict liability upon a person or business who sells defective food that causes injury or harm, and also states, " Under § 2(a), a harm-causing ingredient of the food product constitutes a defect if a reasonable consumer would not expect the food product to contain that ingredient."

Adequate warnings are required when there is a "foreseeable" risk of harm, or a product will be considered to be defective. If an injury results when one consumes a defective food product, the provider will be held strictly liable. The definition of a defective product includes those products where injury could have been avoided by the provision of an adequate warning to the customer.

Strict Liability or Negligence

While the language of the Restatements (2d) and Restatement (3d) sometimes use the term strict liability, the comments, notes and court decisions frequently apply a negligence standard and while denomination the results in terms of strict liability. In an interesting article pointing out what the courts have really been doing, Defectiveness Restated: Exploding the "Strict" Products Liability Myth, David Owen states:

As with the definition of design defects in section 2(b), warning and instruction defects are defined in section 2(c) and its comments in terms of foreseeable risk, reasonableness, optimality, and balance. These important underlying principles are the concepts that the courts and commentators have found proper for resolving warning and instruction defect cases, and the new Products Liability Restatement captures them in section 2(c). Yet, the Third Restatement fails to take the proper final step of grounding them as well in negligence law doctrine. Instead, it stretches logic, common sense, and the English language beyond good sense in order to force the liability standard based on such principles into a strictly framed defect mold. p. 766.

DUTY TO WARN

While both Section 402A of the Restatement (Second) of Torts and the Restatement (Third) of Torts: Products Liability contain language requiring warnings to consumers, the courts must determine after an injury has occurred if a warning should have been given and was not given, or if a warning should have been given, and was given in an inadequate manner. Both Restatements provide additional insight in order to determine whether a warning must be given to prevent injury from allergic reactions to food. When a warning to customers is deemed to be necessary, the failure to warn will cause that product to be considered defective and subject to the seller to strict liability for any subsequent injury.

When is a warning required?

Comment J of Section 402A of the Restatement (Second) of Torts states.

Directions or warning: In order to prevent the product from being unreasonably dangerous, the seller may be required to give directions or warning, on the container, as to its use. The seller may reasonably assume that those with common allergies, as for example to eggs or strawberries, will be aware of them, and he is not required to warn against them. Where, however, the product contains an ingredient to which a substantial number of the population are allergic, and the ingredient is one whose danger is not generally known, or if known is one which the consumer would reasonably not expect to find in the product, the seller is required to give warning against it, if he has knowledge, or by the application of reasonable, developed human skill and foresight should have knowledge, of the presence of the ingredient and the danger.

Comment J of the newer Restatement (Third) of Torts uses similar language to describe warnings that must be given:

Products Liability Warnings: A product seller is not subject to liability for failing to warn or instruct regarding risks and risk-avoidance measures that should be obvious to, or generally known by, foreseeable product users. When a risk is obvious or generally known, the prospective addressee of a warning will or should already know of its existence. Warning of an obvious or generally known risk in most instances will not provide an effective additional measure of safety.

When reasonable minds may differ as to whether the risk was obvious or generally known, the issue is to be decided by the trier of fact. Clearly, warnings meant to protect people from allergic reactions caused by consuming food at

a restaurant may be necessary in some instances. The very difficult decision that must be made by restaurant owners is whether a warning is necessary, and what will make the warning adequate. If a court determines that a warning was necessary should have been given, and if the warning was either not given or if it was given inadequately, then the courts will impose liability for the ensuing injury from the allergic reaction. The difficulty of being able to prove that a warning was, in fact, given and was adequate becomes more of a problem if the warning was a verbal warning. The issue of whether a verbal warning was or was not ever given, and if it was given what it consisted of was the issue in the case of Walker v Bertucci's, Inc., (6 Mass. L. Rep. 476 (Mass. Super. At Middlesex, 1997)). Janet Walker ate a chicken pesto sandwich at the Bertucci's Restaurant in Salem, New Hampshire. As a result of an allergic reaction to nuts in the pesto sauce, Walker subsequently died. Kennedy was the waitress who served Walker. The parties dispute the fact as to whether Walker was timely informed that the pesto sauce contained nuts." p. 476.

Section K of the comments to the Restatements (Third) discusses products causing allergic reactions. Some foods might be considered to be defective because a customer suffers an adverse allergic reactions where no warning or inadequate warnings are given. The comment, Section K states:

The general rule in cases involving allergic reactions is that a warning is required when the harm-causing ingredient is one to which a substantial number of persons are allergic. The degree of substantiality is not precisely quantifiable. Clearly the plaintiff in most cases must show that the allergic predisposition is not unique to the plaintiff. In determining whether the plaintiff has carried the burden in this regard, however, the court may properly consider the severity of the plaintiff's harm. The more severe the harm, the more justified is a conclusion that the number of persons at risk need not be large to be considered "substantial" so as to require a warning... The ingredient that causes the allergic reaction must be one whose danger or whose presence in the product is not generally known to consumers. When both the presence of an allergenic ingredient in the product and the risks presented by such ingredient are widely known, instructions and warnings about that danger are unnecessary. When the presence of the allergenic ingredient would not be anticipated by a reasonable user or consumer, warnings concerning its presence are required. Similarly, when the presence of the ingredient is generally known to consumers, but its dangers are not, a warning of the dangers must be given.

Again the note attempts to clarify, but does the comment allow the owner of a restaurant to make decisions that will withstand a challenge in court? One might ask the following questions to determine whether the comment clarifies or confuses the issues: What are "substantial" numbers of people, if the injury is severe then should the "substantial" requirement be ignored, is the danger "known" or unknown to the consumer, is the dangerous product not normally be "anticipated" in a dish, was the presence of the allergen foreseeable? Depending upon the answers, the court may determine, after the fact, that the restaurant should have provided an adequate warning to the customer.

While there are very few reported court cases that actually go to trial involving injury caused by allergic reactions to food products served in restaurants, some leading cases involving allergic reactions to products do provide some guidance. Courts have adopted language very similar to the Restatements in determining the necessity for warnings to consumers to prevent injury. In one of the leading cases on the duty to warn, where the court found no duty to warn, it did adopt language indicating that warnings were necessary in some situations. In Presbrey v. Gillette Company, (105 Ill. App 3d 1082, (1982). p.1092, a person suffered an allergic reaction to a deodorant product that did contain a warning to stop use if a rash developed. The court stated:

where a product contains an ingredient to which a substantial number of the population is allergic, and the ingredient is one whose danger is not generally known, or if known is one which the consumer would reasonably not expect to find in the product, the seller is required to give warning against it, if he has actual or constructive knowledge thereof.

The court found that even though an injury did occur as a result of an allergic reaction, a substantial number of people were not allergic to the ingredient, and there was little to indicate that the product would cause an allergic reaction. The comments and cases provide information regarding warnings of ingredients causing allergic reactions that appear to cause dangers for unwary restaurant owners. If a reasonable person would be not anticipate that the ingredient would be in a specific food product, a warning is necessary. No warning would be necessary when peanuts are contained in a peanut butter sandwich as the presence of the ingredient in this food product is widely known. A warning must be given if the presence in the particular product would not be generally known or anticipated, where, for example, the chef includes Peanut butter in Chili as a thickener.

In the very interesting, but disturbing case of Thompson v. East Pacific Enterprises, Inc., and Genghis Khan Restaurant, Inc., (2003 Wash. App. Lexis 232, (Court of Appeals of Washington, Division One, 2003), one can see that the results in court do not always seem to make complete sense. The case points out the dangers to customers who are allergic to certain ingredients, as well as the potential dangers to restaurant owners. The plaintiff, a registered nurse, had a serious, known allergy to peanuts. She ordered an "Almond chicken" dish from the defendant restaurant, a dish that she had

purchased before from the restaurant. She made no inquiry as to whether it contained peanuts, and was provided no warning from the restaurant that the dish contained peanuts. While the recipe for the dish did not contain peanuts, the dish did contain peanut residue that probably resulted from cross contamination with another dish or another utensil or cutting board. After consuming one bite of the dish, she suffered an immediate, severe allergic reaction, including the loss of consciousness, respiratory arrest and heart attack. Her suit contended that the product was not reasonably safe on account of inadequate warnings that it might have contained peanuts from cross contamination. The court in its decision for the defendant states that "Section 402A of the Restatement (Second) of Torts states does not require Genghis Khan to warn of dangers associated with common allergens such as peanuts." p. 9. The court in an interesting footnote, states that while "there may be a duty to warn of the inclusion of a common allergen as an ingredient in a product where the ingredient 'is one which the consumer would reasonably not expect to find in the product' Thompson does not cite to or present argument with respect to this portion of comment J." p 9. It appears that the court could have easily determined that the restaurant owner was liable for a failure to warn if the plaintiff had raised the issue.

In the article by William Prosser, (1999), *Strict Liability to the consumer in California*, the author states " There are also numerous cases dealing with allergies, in which the rule has been worked out that if the product is reasonably safe for the normal user the seller does not become liable for the harm to the abnormal one. If he is, or should be, aware that a substantial number of the prospective consumers will be allergic to the ingredients, even though they represent only a small percentage of the total population, he is required to give due warning of the danger; and no doubt if the warning is not given the product is to be considered unsafe and there will be strict liability." P 828. In Brown v. McDonald's Corporation, (1995), (infra) the court was presented with a question concerning whether a duty exists to warn the customer of an ingredient that subsequently caused an allergic reaction. Susan Brown suffered an allergic reaction from a seaweed derived ingredient contained in a McDonald's McLean Deluxe hamburger. She alleged that McDonald's was liable because they knew, or should have known, that consumers could have such a reaction, and had failed to warn her of the presence of the ingredient and of the risk it posed to her. The court granted a summary judgment in favor of the defendants, and relied upon the standards created by Comment J Section 402A of the Restatement (Second) of Torts. The court determined that the plaintiff had not shown that the substantial number of people have an allergic reaction to carrageen or that the ingredient posed a risk of severe allergic reaction.

ADEQUACY OF WARNINGS

Dobbs, in The Law of Torts states "When a danger is avoidable, a warning may reduce the risk or magnitude of harm by permitting the consumer to use the product with greater safety." P 1005. In the case of a person allergic to a certain food product, the warning allows the person to avoid the food and to avoid the allergic reaction that is caused from eating that food." When there is a duty to warn of allergens in food products, the next question to be determined is whether a warning that is given is adequate or inadequate. The duty of a seller of food products to provide an adequate warning to customers of certain ingredients and the issue of adequacy of a warning is generally one for the jury to decide.

The case of East Penn Mfg. Co v. Pineda, 578 A. 2d 1113 (D.C. 1990, 1122), while not involving a food product, does indicate how courts decide whether warnings are adequate. "In cases in which there is a potential for serious injury, the adequacy of even a relatively clear warning should not be determined as a matter of law, but is a question of fact for the jury." If the question is one for the jury, there is always the matter of proving the contents of an oral (rather than written) warning or even whether a warning was ever given. In another non food case involving the question of whether a warning should have been given, the court states, "where reasonable minds might disagree as to the extent of the plaintiff's knowledge of the hazard, the question is one for the jury." Liriano v. Hobart Corporation, U.S. Court of Appeals, 170 F. 2d 264, (1999, 269). In Horvath v. Deutsche Lufthansa, U. S. District Court for the Southern District of New York, 2004 U.S. Dist. LEXIS 3873, (2004, 1)., "the issue of whether the plaintiff informed the flight attendant of her food allergy is hotly contested." The Restatements do not provide much assistance to the courts in trying to determine what type of warning will suffice. Dobbs states that a warning is not reasonable unless it is of "sufficient clarity and also sufficient force and intensity to convey the nature and extend of the risks to a reasonable person." P 1009. As a result, the courts have had looked to the actual content of the warning to assist in determining the adequacy of the warning. Mitchell, (2001) states: In order to be considered adequate, a warning must identify the scope of the attendant danger as well as the seriousness of the harm that could result from any foreseeable misuse of the product. An adequate warning should allow consumers to make informed choices about the risks they could suffer from the use of a product. A company effectively warns society of the product's dangers by prominently and clearly communicating the pertinent risks. Finally, an adequate warning serves to protect each buyer's safety by emphasizing the product's dangers to that buyer." p 578.

Note 10 of the Restatements (Third) states that the content of the warning must be sufficient to "allow the user or consumer to avoid the risk warned against by making an informed decision not to purchase or use the product at all and

hence not to encounter the risk." In the article by Lee, T. H., (May, 1994). A Purposeful Approach to Products Liability Warnings and Non-English-Speaking Consumers, in The Vanderbilt Law Review, 47, 1107-1142, the focus of the article is on the adequacy of warnings for customers who do not speak English, are younger children, are blind, are disabled, or are otherwise unable to understand warnings that are given to them. While those topics are beyond the scope of this article, the author states at p. 1116:

An adequate warning must identify both the scope of the attendant danger and the seriousness of the harm that could result from foreseeable misuse of the product. Adequate warnings allow consumers to make informed choices about the risks they will incur by using the product. They prominently and clearly communicate the pertinent risks, effectively informing society of the product's dangers. Finally, adequate warnings protect each buyer's safety by emphasizing the product's dangers to that buyer.

Customer Requests Ingredients Information and is Provided Incorrect information

In some situations, customers who are allergic to certain ingredients make known their allergy to the restaurant. In most of those situations, the server, manager, or chef is able to help the customer identify those foods containing the allergen and assist in providing foods that are free of the specific allergen. Sometimes, however, when a customer informs the restaurant that she is allergic to a particular ingredient, or inquires as to whether the foods contain a specific ingredient, the restaurant provides incorrect information, often with disastrous results. In the case of Sysco Food Services, Inc. et al v. Trapnell, Supreme Court of Texas, 890 S.W. 2d 796, 798, 1994, Susan Trapnell was a chronic asthmatic. She was allergic to sulfites, a food additive used to process and preserve food. Her reactions to sulfites ranged from "asthma attacks" to, in severe cases, "anaphylactic shock." ...Susan, her husband, Benjamin, and their son, Nicholas, went to the Officer's Club at the Corpus Christi Naval Air Station to dine at the buffet. Before going through the buffet line, Benjamin asked one of the cooks whether any sulfites had been used in the preparation of the fruit salad. The cook, Robert Mangohig, responded that no sulfites had been used, but offered to get Mr. Trapnell some fresh fruit from the kitchen. Mr. Trapnell declined, and the Trapnells went through the buffet line. Susan allegedly served herself fruit from the fresh fruit bowl, hash browns, apple pie filling, and other foods. Within minutes after she began eating, Susan had a violent reaction. ...Susan began having seizures. E.M.S. rushed Susan to the Naval Air Station Hospital, where she arrived with no pulse. Susan's brain activity ceased on August 9, and on August 10, the doctors pronounced her dead.

The case illustrates the difficulty in proving what warnings were given, what questions were asked, and which one of the food distributors may or may not have responsibility, as it appeared that the plaintiff died from Sulphite allergic reaction. At trial, it appeared that the fresh fruit bowl, hash browns, apple pie filling, and other foods all contained Sulphites, although none of them, by themselves, contained amounts sufficient to kill her. It also appeared that the question posed by her husband referred only to the fruit salad. While the Texas Supreme Court sent the case back to the lower for further hearings, there is no further record of court decisions in the case. It would certainly appear that the chef was put on notice of the plaintiff's allergy to sulphites, and had a duty to inform the customer of other foods that contained sulphites. "In most cases, however, reliance on the representations of restaurant employees is probably sufficient to establish liability for a failure to warn." Bridges, J. (2000) Suing for Peanuts, p 1280.

In the case of Livingston v. Marie Callenders, Inc., 72 Cal. App. 4th 830; 85 Cal. Rptr. 2d 528; (1999), a customer who was allergic to Monosodium Glutamate (MSG) inquired whether the soup he was ordering contained MSG. He was told by the waitress that it did not. He consumed the soup, and then suffered a severe allergic reaction. In his suit against the restaurant, the lower courts dismissed his claim in strict liability for failure to warn. The California court of Appeals remanded the case for further action, reinstating his cause of action based upon the failure to warn. The court, in its decision, adopted the language of Comment J Section 402A of the Restatement (Second) of Torts and stated:

"a defendant may be liable to a plaintiff who suffered an allergic reaction to a product on a strict liability failure to warn theory when: the defendant's product contained an ingredient to which a substantial number of the population are allergic; the ingredient is one whose danger is not generally known, or if known is one which the consumer would reasonably not expect to find in the product; and where the defendant knew or by the application of reasonable, developed human skill and foresight should have known, of the presence of the ingredient and the danger."

Omitted Warnings that Would have been Ignored

When warnings are necessary, their absence results in the product not being reasonably safe at time of sale. Although the product may be defective because of the lack of adequate warnings, if it can be shown that a specific customer would have ignored the warning and consumed the product anyway, the lack of warnings would not be a legal cause of that person's harm. "Where warning is given, the seller may reasonably assume that it will be read and heeded; and a product bearing such a warning, which is safe for use if it is followed, is not in defective condition, nor is it unreasonably dangerous." P 353 Comment J Section 402A of the Restatement (Second) of Torts.

LEGISLATION

New York and New Jersey currently have legislation pending that would require restaurants to have knowledgeable people present who could provide information to consumers regarding allergens. Similar bills have been defeated in Illinois, Massachusetts, Connecticut, and Rhode Island. The recent passage of the Food Allergen Labeling and Consumer Protection Act of 2004 might provide some guidance to a restaurant owner or franchisor who wishes to develop a policy to prevent injuries and lawsuits from customers who are allergic to certain foods. The findings cited earlier appear to establish the "substantial numbers" requirement as well as the "severity" requirement found in the Restatements Third for many people who are allergic to the eight most common allergen groups. While the Act specifically does not apply to restaurants, the courts might very easily look to the findings as well as the actual amendment language to determine when a restaurant would need to provide a warning. The Act requires food manufacturers to clearly state if a product contains any of the eight major food allergens of milk, eggs, peanuts, tree nuts, fish, shellfish, wheat, and soy.

WHAT SHOULD A RESTAURANT DO?

While the new Food Allergen Labeling act does not apply to restaurants, it might make sense for a restaurant to develop and adopt written policies that would include written warnings, ingredient lists, and lists of foods containing the eight common allergens. A restaurant could use the new statute and adopt some of the labeling requirements to the food that it serves in its restaurant. Recipes could be standardized and printed and made available to customers listing all ingredients. A policy could be established to prevent deviations from the recipe, as well as policies to avoid cross contamination. Written warnings could be provided either on the menu or to the staff, with statements on the menu indicating the complete ingredient list is available. Warnings or notices of eight major allergen ingredients could be put on menus. Policies could be adopted regarding how to respond to questions from customers regarding ingredients. These steps, taken in conjunction with the educational programs developed by the National Restaurant Association, would help to prevent injuries and lawsuits from customers who are allergic to certain foods.

CONCLUSION

It is estimated that over 11 million people are allergic to some food ingredients. Restaurants are strictly liable to consumers when they sell defective food that results in injury, according to the Restatement (Second) of Products Liability, the Restatement (Third) of Torts: Products Liability and court decisions. In some situations, a restaurant may have an obligation to provide a warning to consumers that their food may contain allergens. This paper has discussed the obligations of restaurants to provide warnings of allergens to allow those customers to avoid allergic reactions. The discussion included attempts to determine the adequacy of warnings, the liability when incorrect information is provided, and the liability when a warning is provided but not heeded. Recent amendments to the Food and Drug Act place an obligation upon food manufacturers to list food ingredients in order to assist those who are allergic to food to avoid those products. While the Act does not apply to restaurants, the court may use those requirements placed upon food manufacturers as guidance when confronted with cases involving restaurants, allergic reactions to food served, and the duty to warn and the adequacy of warnings.

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DO SMOKING BANS MATTER? FINDING A STRATEGIC APPROACH IN THE GAMING INDUSTRY

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ABSTRACT

This study explores the economic impact of Delaware's comprehensive smoking ban on its gaming industry, while comparatively and simultaneously examining the gaming industry in one of Delaware's competitors, West Virginia, where no such ban was in effect. The results provide evidence of a negative economic impact of the smoking ban on Delaware's gaming industry. Two strategic scenarios in which the gaming industry could minimize such negative effects are proposed. Our findings suggest that the specific market environment of each state or municipality should be examined strategically and on a case-by-case basis, by both industry and government, to assess the potential economic impact of smoking bans.

Key Words: Smoking Ban, Economic Impact, Gaming, Strategy

INTRODUCTION

As secondhand smoke is increasingly associated with risk for lung cancer and coronary heart disease, more states and municipalities in the United States have introduced or are considering smoking bans in public places. As of July 2004, there were 312 jurisdictions in the United States that had smoke-free provisions in effect. More than half of these regulations exclude restaurants or bars, and most exclude casinos (if applicable) (Americans for Nonsmokers Rights, 2004).

While the health benefits of smoking bans are apparent, the potential threat to the hospitality industry has also been substantially noticed in recent years. A significant debate is whether smoking bans should be applied in the hospitality industry to the same extent as in other public places (Hyland, Puli, Cummings, and Sciandra, 2003; Scollo, Lal, Hyland, and Glantz, 2003). Some studies have focused on the impact of smoking bans on hotels, restaurants and bars (Hyland et al., 2003). Notably missing, however, is work aimed at other important sectors of the hospitality industry, such as the gaming industry. Further, most previous research in this area has failed to consider economic trends occurring in potentially competitive markets during the period when the subject market was analyzed. Moreover, most studies were funded by either anti-smoking advocacy groups or tobacco-related organizations, potentially biasing the researchers.

This study expands on previous research and attempts to overcome limitations by examining the effect of smoking bans on the gaming industry without being supported by either smoking or anti-smoking advocacy groups. While the negative social and health effects of smoking revealed in previous research are well understood, this study focuses on economic data and compares the casino revenues of Delaware and West Virginia before and after Delaware's statewide comprehensive smoking ban took effect in November 2002. Based on the findings, we outline the distinctions of casinos compared with the other previously studied hospitality industry segments that were not significantly affected by smoking bans, and propose strategic implications in two possible future scenarios in which the gaming industry could minimize the potentially negative economic effects of smoking bans.

SMOKING BANS AND THE HOSPITALITY INDUSTRY

Restaurants and bars are the most widely studied sectors within the hospitality industry with regard to the economic effects of smoking bans, and the results of the studies have been mixed. It is noticeable that many studies sponsored by health and anti-tobacco organizations revealed no negative financial impact from such regulations, while many other studies, which were supported by the tobacco industry, claimed significant adverse economic effects. Despite the different perspectives of researchers, in general, the majority of the studies have shown that smoking bans have had no significant adverse impact on sales or employment in restaurants and bars (Hyland et al, 2003; Scollo et al, 2003). On the other hand, partially due to the fact that fewer states and local governments mandate anti-smoking policies in casinos, fewer studies have been concerned with the gaming industry. In the trade press, it has been reported that casino revenues have declined in virtually every jurisdiction mandating smoke-free regulations. According to Monaghan (2004), in the state of Victoria in Australia, a partial smoking ban, which only regulates smoking in the areas around gaming machines and gaming tables, but not in bars, was introduced in September 2002, and resulted in total revenue declining by 8.9 percent in

a 10-month period thereafter. Whereas a six percent annual growth rate was forecast by the industry before the Victoria smoking ban, it is now projected that it will take the industry seven years to recover to 2002 revenue levels. In New Zealand, where anti-smoking policies have a December 2004 scheduled nationwide introduction, the net effect on total gaming expenditures is officially expected to be even more dramatic.

In the United States, there are three states that allow and regulate “video lottery” (i.e., slot machines) at racetracks: Delaware, West Virginia, and Rhode Island. In 1994, the Delaware legislature passed the Horse Racing Preservation Act, which legalized “video lottery operations” at three Delaware horse racing locations. During each year from 1993 through 2002, casino revenue grew in Delaware. The Delaware gaming market was regarded relatively efficient in terms of revenue productivity. In 2002, the revenue per slot machine per day in Delaware was \$290, ranking fourth among 20 major American slot machine gaming markets. Such relative profitability suggested room for potential expansion as recently as 2002 (O’Neill, 2004). By December 2002, there were 5,430 slot machines in the three racetrack casinos, which contributed more than \$200 million annually to the state, making up approximately eight percent of the state budget. Depending on which of the three facilities is being analyzed, between 65 and 84 percent of gamblers come from out of state. Pennsylvania, Maryland, and New Jersey are the top three feeder markets for the three casinos, and Washington DC and Virginia are significant feeder markets, as well (Bear Stearns, 2003; O’Neill, 2004).

On November 27, 2002, the “Delaware Clean Indoor Air Act”, a comprehensive smoking ban went into effect. This smoking ban outlawed any smoking in all indoor public places, including restaurants, bars, and casinos, and was admired as the strictest and most wide-ranging anti-smoking policy in the country. However, the smoking ban has resulted in Delaware experiencing the nation’s largest loss in casino revenues. Delaware’s gaming revenues have continuously declined every month since December 2002, resulting in an annual 10.6 percent negative growth rate in 2003 (Delaware Lottery, 2003). Even Governor Ruth Ann Minner acknowledged that the state budget would experience a potential loss of as much as \$57 million annually at the time she signed the regulation in May 2002. In addition to the decline in direct gaming revenue, Delaware could have indirect losses in other related businesses, such as tourism, as well (Marcel, 2004).

In the state of West Virginia, four racetracks were authorized to operate video lottery machines in 1994. Five years later, West Virginia passed a bill, referred to as the “Limited Video Lottery Act,” allowing for a maximum of 9,000 slot machines in bars and restaurants serving alcohol and a maximum of five slot machines per establishment (West Virginia Lottery, 2004a). Despite steadily growing revenues, West Virginia’s slot machines have had a much lower level of profitability than Delaware’s. At the end of 2002, there were 9,754 slot machines in the four racetracks and 5,329 slot machines in 1,600 bars and restaurants. The revenue per slot machine per day in West Virginia was \$182, ranking 11th among 20 similar markets, and more than a third of 9,000 allowable limited video lottery licenses remained unclaimed (Lottery Insider, 2002). Ohio, Virginia, Pennsylvania, and Kentucky are major out-of-state feeder markets, and Maryland and Washington, DC, generate demand, as well (Bear Stearns, 2003). As one of the competitors of Delaware’s gaming industry, West Virginia’s gaming revenue has seen a double-digit growth rate since Delaware’s smoking ban went into effect. Video lottery revenue was reported up 32.6 percent in the fiscal year ending June 2003, and 23.2 percent in the fiscal year ending June 2004 (West Virginia Lottery, 2004b). Since March 2003, the West Virginia Lottery Commission has approved 1,000 and 500 additional slot machines at two racetracks (Lottery Insider, 2004).

Regardless, two significant limitations were identified in the existing literature on the effect of smoking bans on the gaming industry. First, most of the literature was published in gaming-oriented trade magazines and these studies may be (or at least perceived to be) biased. Second, the lack of rigorous research-design, systematic data analysis, and peer-review process further weakens the persuasiveness of previous articles. In this study, we seek to provide insights into the “smoking ban on revenue” dilemma based on systematic procedure and robust statistical analysis.

METHODOLOGY

This study is designed to explore the economic effects of Delaware’s smoking ban by comparing the casino revenues of Delaware and West Virginia before and after the Delaware smoking ban took effect in November 2002. The casino revenue data were obtained from the Delaware State Lottery and West Virginia Lottery. Due to the fact that the smoking ban in Delaware was in effect for less than two years at the time of this study, to take into account the yearly cyclicity of the gaming industry, the data were collected to include both states’ casino revenues 12 months before and 12 months after the Delaware smoking ban became effective. Since the original data consist of uneven periods (some periods had four weeks’ revenue and some had five weeks’ revenue), they were adjusted to be comparable. By multiplying the revenue numbers of all five-week periods by 80%, the estimated four-week revenue of each period was obtained.

We chose to use time series analysis for evaluating the data. Although the time series approach is mostly used for

forecasting, it is also commonly applied for explanation purposes (Meeker, 2001). In particular, while we acknowledge that the sample consisting of only 24 monthly revenue figures is normally considered to be relatively small, a time series approach is statistically sound for this study because the data (monthly casino revenues) were collected repeatedly over time in both states and show clear cyclical patterns throughout the year. Consequently, to reveal the changes of both states' casino revenues after the Delaware smoking ban became effective, a time series autoregressive model is fitted with computer-based SAS software for each state. In each model, casino revenue is the response variable. The explanatory variable is the presence or absence of the smoking ban, which is a "dummy" variable, coded as 0 for the absence of the Delaware smoking ban and as 1 for the presence of the ban. It is noticeable that the number of slot machines increased in both states during the study period. Delaware had gradually added a total of 247 terminals in the two years, while there was a considerable change in West Virginia as one racetrack added 746 slot machines on July 1, 2003. To examine the potential effect of the increased number of slot machines on the revenues, the number of each state's slot machines was originally included in the time series autoregressive model as a second explanatory variable. However the statistics reveal that the number of slot machines is not a significant factor in explaining the revenue trends in either state ($p > 0.05$). Therefore, this factor was not incorporated in the final model.

RESULT

The results of the analyses of both states indicate that, after Delaware's smoking ban took effect, the revenue changes (decrease or increase) in both states were significant ($p < 0.001$). In the analysis of Delaware, the autoregressive model shows that the presence/absence of the smoking ban is effective at predicting casino revenues ($R^2 = 72.2\%$, $p < 0.001$). The model concludes there was a significant decrease in Delaware's casino revenue since November 2002. Similarly, the autoregressive model fitted for West Virginia reveals that there is a significant increase in its casino revenues since November 2002, when the Delaware smoking ban went into effect ($R^2 = 47.9\%$, $p < 0.001$). The magnitude of the overall model for West Virginia is less strong than the one for Delaware, and therefore, it suggests the plausibility of other factors as additionally explaining the overall upward trend in West Virginia. We believe, however, that this model effectively explains the correlation between Delaware's smoking ban and West Virginia's casino revenues (as well as Delaware's) based on the statistics presented.

DISCUSSION

Smoking bans are currently viewed as one of the single greatest threats to consumer expenditures and long-term strategies in the hospitality industry of many markets around the world (Monaghan, 2004). As statewide smoking bans have not yet been commonly instituted in most states where gaming is a major industry, Delaware is to date the most significant case regarding the effects of smoke-free regulations. The findings of this study indicate that, at least in the short term, Delaware's smoking ban indeed has had a negative effect on the revenue of Delaware's gaming industry. Simultaneous to this downward trend, West Virginia's gaming industry (one of Delaware's competitors), where there was no smoking ban, registered significant revenue improvement. However, this study may not have yielded a final conclusion that could be generalized worldwide.

While gaming revenues of the two states were presented comparatively, the results of the data analysis should be treated cautiously. On the one hand, it may be argued that some gaming patrons who are smokers and reside in neighboring no-casino states/area (Pennsylvania, Maryland, Virginia, and Washington, DC) could easily travel to gaming venues in either Delaware or West Virginia, and might have elected to more frequently patronize West Virginia establishments over those in Delaware after the smoking ban went into effect. On the other hand, alternative explanations could exist. This study takes a few possible alternatives into consideration. In addition to the previously mentioned test of scrutinizing the potential impact of the increased number of slot machines on the revenues during the study period (which was found to be an insignificant predictor), we examined the marketing efforts of both states as well, and found that there was a bigger drop in marketing expense in West Virginia (-6.2%) than in Delaware (-3.7%) during 2003 (Delaware Lottery, 2004; West Virginia Lottery, 2004b). Therefore, the increase of West Virginia's gaming revenue could not be attributed to the change of the state's marketing expense. Indeed, such data appear to support that the Delaware smoking ban was a significant factor in the subsequent revenue trends in both Delaware and West Virginia. However, we acknowledge that there may be other factors that also contribute to the casino revenue changes in the two states studied, and wide-scale consumer research would be required to more comfortably draw a concrete conclusion of causality from the smoking ban to its effects on the gaming industry. Instead, by revealing the opposite revenue trends in Delaware and West Virginia, this study aims to expose the distinctions of casinos compared with previously studied hospitality segments, to indicate two possible future scenarios in which smoking bans may have effects on the gaming industry, and to delineate strategies for industry practitioners and government officials in their efforts to minimize the potential negative effects of smoking bans.

The findings of this study are not consistent with the results of much of the previous research on the effects of smoking bans on restaurants and bars. We propose that this contrast reflects a fundamental difference between casinos and restaurants/bars. While restaurants and bars primarily compete at a local level, studies reveal that in many states, casino revenues are primarily generated through out-of-state patronage (Bear Stearns, 2003). It is interesting to note that Delaware's earlier proposed anti-smoking bill, which included a provision allowing smoking in casinos, was not approved in 2001. One of the important reasons was that restaurants, led by the Delaware Restaurant Association, had strongly opposed that bill because it would put the traditional restaurants at a severe disadvantage in their competition with restaurants and bars in casinos. After the anti-smoking bill was revised to include casinos, the Delaware Restaurant Association withdrew its opposition (Doss, 2002). While Delaware's restaurants have avoided the smoke-free disadvantage because their business is mostly local, unfortunately, its casinos have been put in an underprivileged position of competing with gaming establishments in nearby states and areas where smoking is allowed. A classic case is Philadelphia, the nation's fifth largest gaming feeder market, which generates over 13 million casino trips annually. Philadelphia is approximately a 50-minute drive from Atlantic City and a 25-minute drive from Wilmington, Delaware, where the largest Delaware gaming venue is located. It may be assumed that smokers would probably drive a few extra minutes to a casino where they can smoke when playing slots. In fact, after the Delaware smoking ban went into effect, slot machine revenues increased over two percent in Atlantic City (in 2003). Another more recent example corroborating this trend occurred in Pierce County in the state of Washington, where a smoking ban went into effect in January 2004. Those smoke-free casinos experienced an immediate negative impact, reporting a 25 percent decline in food revenues, a 42 percent decline in liquor revenues, a 35 percent decline in gaming revenues, and began significant layoffs during the first quarter of 2004. Yet, the tribal gaming houses, which are exempt from the county smoking ban, and the casinos in neighboring counties allowing smoking, have reported increased revenues since the smoking ban went into effect (Barker, 2004).

STRATEGIC IMPLICATIONS

The complicated competition mix of casinos, (which are often regulated by different legislations), cautions that the effects of smoke-free regulations on the gaming industry must be examined strategically and on a case-by-case basis. The specific market environment, including both demand and competition of each state or each municipality, should be carefully analyzed by both governmental decision makers and hospitality operators who influence these decision makers.

It is undeniable that mandating a comprehensive smoking ban may be beneficial for public health. However, in states and municipalities where casinos would be most seriously affected by smoking bans due to regional competition, reasonable strategic compromises could minimize such negative effects while still achieving the primary goal of creating healthier environments. It is to be expected that smoking bans will be introduced to more states and municipalities in the future. Two likely scenarios could be proposed: first, a few more states may join Delaware in introducing similar comprehensive smoke-free regulations that would outlaw smoking in casinos; and second, some states will establish smoking bans that exclude gaming establishments. In either scenario, given the potentially significant negative economic impact smoking bans can have on the gaming industry, careful strategic considerations should be evaluated by both legislators and industry practitioners. From the legislators' perspective, the challenge lies in how to qualify and quantify the economic impact of smoking bans on the gaming industry and then to balance such impact with other economic and social impacts and benefits. To the gaming industry, although the second scenario is less challengeable and more preferable, in fact both scenarios require significant monetary and non-monetary input. The following section provides detailed strategic suggestions to industry practitioners regarding these two scenarios.

In states and municipalities that do not rely heavily on smoking gamblers and where out-of-state competition is not fierce, it may not be highly detrimental to have universal smoking bans implemented. Due to the smoking bans not generating significant competitive disadvantages for the casinos in those states and areas, the effects will not be as significant as the economic losses experienced in Delaware. In such states, one of the primary strategies for casino operators to pursue may be persuading the policy makers to provide casinos some reasonable compensation to offset possible revenue losses. For example, allowing casinos to have more slot machines, to extend their operating hours, and to expand slot machine selections to target new customers could be at least partially beneficial to casinos and to state revenue. Moreover, another approach could be promoting the state's or a particular casino's smoke-free environment. Depending on the demographics of customers, smoking bans could even enable casinos to gain competitive advantages. A few casinos that voluntarily became smoke-free have had some success in this regard (Yard, 2004).

Among the states that have slot machine operations, we believe that most of them should and will exclude casinos from their smoke-free regulations. As discussed previously, in the states where the gaming industry is a major employer, the potential negative economic impact of a smoking ban could go beyond the casino revenue losses to include decline in tourism in general, and lost jobs as a result of that. To avoid such a serious loss, it is strategically crucial for the gaming

industry to make all possible efforts to assess the economic effect of smoking bans and to assist policy makers in understanding the significance of such impact. Equally important, industry leaders should suggest reasonable alternative regulations that could protect both non-smokers and casinos. Instead of adopting a comprehensive smoking ban, casinos may be required to comply with other specific regulations such as separating smoking and non-smoking areas with physical walls, and meeting high air quality equipment and measurement standards. Fortunately, sophisticated air replacement and filtration systems have become available to greatly improve the air quality even in smoking areas and to isolate non-smoking employees from smoking customers (Legato, 2004). In the casino industry, the availability and use of such advanced technology plays a critical role in minimizing the negative economic impact of smoking bans.

SUGGESTION FOR FUTURE RESEARCH

We hope the results of this study will provide both policy makers and industry practitioners with valuable insight into the strategic threats, opportunities and possible options related to implementing smoke-free regulations. However, the findings of this study should not be interpreted to indicate that smoking bans permanently hurt all casinos equally worldwide. More studies are needed to fully assess the impact of smoking bans on the gaming industry. Although the situation of Delaware is the only case with available revenue data to date, it is reasonable to expect that various markets may respond differently in the future. When more jurisdictions mandate smoking bans, like Pierce County in the state of Washington did in 2004, more data will become available, and consequently future studies incorporating more smoking-ban-affected gaming markets would be informative. Furthermore, it is possible that many casinos will benefit from smoking bans in the long run because as people adjust to the change over time, more and more non-smoking gamblers may prefer to stay and play longer in a smoke-free environment. The available data prevented this study from examining any long-term effects because the Delaware comprehensive smoking ban, the earliest such regulation, was in effect less than two years at the time of this study. Future research might focus primarily on comparing the short-term and long-term effects of smoking bans when such data become available, and thus would reveal a more complete picture.

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HOSPITALITY PRACTITIONERS' PERCEPTIONS OF ETHICS EDUCATION AND THE IMPLICATIONS FOR
HOSPITALITY EDUCATORS, PRACTITIONER, AND STUDENTSRonnie J. Yeh
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ABSTRACT

Ethics is a growing concern for American society, particularly in the hospitality industry. It is a topic that is hard to define and hard to grasp. Educators and practitioners alike are struggling with this issue. The target population of this study was all lodging general managers in the United States. Although not generalizable, the results imply that most lodging companies have not incorporated and implemented ethics education into their training programs, although hospitality practitioners tend to think that they have. In conclusion, there is a need to offer ethics education and training for students and employees.

Key Words: ethics education and training, ethics behavior, hospitality business ethics

INTRODUCTION

According to a recent study, Dopson and Nelson (2003) revealed that ethics was ranked the highest among 37 content areas in terms of required and important program content areas for graduates of U.S. hospitality programs. Hotel executives, hotel human resource specialists, and alumni of the sponsored school ranked the results. The results suggest that it is important to incorporate and implement ethics in the hospitality industry and into hospitality programs. Ethical behavior is a growing concern by many organizations and sections of American society (Vallen & Casado, 2000). Business ethics is a popular topic in both the academic arena and business within the hospitality industry (Damitio & Schmidgall, 1993; Dunfee & Donaldson, 1999). Although business ethics courses are now an accepted part of business school curriculum, a limited effort has been made to measure the perceptions and needs of these courses from educators and industry practitioners (Jaszay, 2002; Murphy & Boatright, 1994). This paper investigated the perceptions and preparations of hospitality practitioners regarding teaching business ethics and ethics education in contemporary hospitality programs and within the hospitality industry.

By preparing hospitality students to logically and ethically solve dilemmas, educators are equipping future managers with confidence and self-esteem to make a "right" decision when confronted with a dilemma. Students must be formally trained in business ethics before they work in the industry (Jaszay, 2002; Vallen & Casado, 2000). A positive ethical working attitude and environment can enhance graduates' and other employees' job performance and satisfaction and have a direct influence on their customers' service and satisfaction. In addition, the integration of ethics into the hospitality curriculum has been advocated by educators (Vallen & Casado, 2000). Developing an awareness and sensitivity to personal integrity should be one of the goals of all hospitality programs and hospitality companies. Hospitality educators prepare students for careers in management and must address ethical and legal issues. There is controversy surrounding the teaching of ethics education. Some argue there is a lack of empirical work in business ethics curriculum. In addition, most educators agree that it is more effective to incorporate a thoroughly planned ethics component into each required course than to teach a separate ethics course (Jaszay, 2002). In terms of instructional technique, several studies have found that discussion of business ethics scenarios (case studies) was the most effective method to boost students' abilities to identify ethical situations and to develop skills in ethical judgment (Burton, Johnston, & Wilson, 1997; Murphy & Boatright, 1994; Vallen & Casado, 2000; Jaszay, 2002; & Weber, 1990). Moreover, Vallen and Casado (2000) and Dopson and Nelson (2003) suggested that ethical challenges appear on a regular basis in the hospitality industry, therefore, hospitality ethics education is imperative for educators and practitioners to implement. Vallen and Casado (2000) suggested that ethics education will provide certain intellectual skills for students to be aware of ethical issues and to act ethically in the workplace.

Purposes and objectives of the study

This research study investigated the perceptions and preparations of hospitality practitioners regarding business ethics and ethics education in contemporary hospitality programs and within the hospitality industry. This study attempted to provide some fundamental findings as to how hospitality practitioners perceive the knowledge and needs of hospitality students and employees relative to business ethics. The research findings were able to provide some implications for hospitality educators and hospitality practitioners as to whether ethics education or ethics training is imperative or not.

Research questions

The research questions that guided this study were:

1. What preparation have hospitality practitioners in the field of hospitality received to help them address ethical challenges in their practices?
2. What are the attitudes of hospitality practitioners toward ethics education preparation for students in the field of hospitality?
3. What are the attitudes of hospitality practitioners toward ethical decision-making in practice in the field of hospitality?

METHODOLOGY

Subjects and sampling plan

The target population of this study was lodging general managers in the United States regardless of the room size of their properties as found in Business Traveler Planner (2001). A sample size of $n = 1,200$ was selected for the hotelier survey by using the Statistical Analysis Software (SAS) Windows v8 (2001). The list of hoteliers was randomly selected from a published traveler guide book- Business Travel Planner (2001), which has approximately 22,000 listed hotels and motels. The sample size $n = 1,200$ was based on the following reasons. Gay and Airasian (2000) indicated that it is common to sample 10 to 20% of the population for descriptive research. Because each study is unique, the “how much is enough” issue can be decided by the researcher for that particular study. For this study, according to the response rate of Vallen and Casado (2000), the researcher expected to have a 9 to 10% response rate. This would be equivalent to 108 to 120 responses and that would be sufficient to conduct the selected statistical analyses in this study.

Instrument

A researcher-designed questionnaire was created from information obtained from the literature review and a focus group. The purpose of the focus group was to identify current hospitality ethical business practices that challenge hospitality practitioners daily. This instrument is defined as “Assessment of Perceptions and Needs for Ethics Education in Hospitality.” A six-point Likert-type scale, Yes/No response options, close-ended questions, and open-ended questions were developed to measure the subjects’ perceptions and needs about ethics education and ethical practices within the hospitality industry and hospitality programs.

The questionnaire was verified and partially developed (second section) by the department directors of hotels (focus group) to increase its content validity. The second section of the questionnaire presented 12 ethical scenarios that reflected practices associated with the hospitality industry. Hotel department directors developed this section. The idea of developing 12 ethical scenarios was derived from 12 core ethical principles of the Josephson Institute in Ethics. The Josephson Institute in Ethics offers training programs for ethics educators and has recommended 12 core ethics principles. These 12 principles are accountability, commitment to excellence, concern for others, fairness, honesty, integrity, law abiding, leadership, loyalty, promise keeping, reputation, and respect for others. These 12 principles have helped many businesses develop and define corporate codes of ethics (Vallen & Casado, 2000). The researcher provided an article of Vallen and Casado (2000) to the hotel directors (focus group), which contained the theories and definitions of these 12 principles. The researcher further asked the hotel directors to read the article and develop 12 scenarios based on the principles and their work experiences. These hotel department directors were employed in different geographical regions, which included towns, small cities, medium-sized cities, and big cities. Covering different geographical regions for the focus group was necessary in terms of research validity because the questionnaire was administered nationwide. The above geographic regions are defined in terms of population as follows: town: up to 19,999, small city: 20,000 to 99,999, medium-sized city: 100,000 to 299,999, and big city: 300,000 or more (www.epodunk.com).

The questionnaire was organized in three sections. The first section listed statements related to organizational ethical practices and standards, practitioners’ knowledge and preparation of ethics education, and the attitudes of practitioners toward ethics education preparation for students. The second section presented 12 ethical scenarios that reflected practices associated with the hospitality industry, which was developed by the hotel department directors. The third section consisted of demographic questions.

Data collection techniques

This research employed postal mail survey methodology due to the fact that e-mail addresses were not available. There were no identity questions in the survey in order to protect the anonymity of the respondents. In addition, the researcher used a code-posted postcard for following up with nonrespondents. When the respondents completed the questionnaire, they mailed the postcards at the same time that they mailed the separate questionnaires. A code-posted postcard helped the researcher to identify who had returned the questionnaires. However, the researcher was unable to

match a code-posted postcard with a certain questionnaire because they were mailed separately and no identification number appeared on the questionnaire.

Data analyses

The data collected were entered into the computer using Microsoft Excel from Microsoft Corporation for statistical analysis (MS Excel, 2000). The data were analyzed using the Statistical Package for Social Sciences version 10.05 (SPSS, 2000). Standard statistical procedures, such as frequency, mean, standard deviation, and factor analysis were used to analyze the data.

RESULTS

A total of 1200 questionnaires were mailed to hospitality practitioners in the United States. One hundred six usable questionnaires were returned, for an 8.8 % raw response rate. There were 56 undeliverable mail invitations. Therefore, the adjusted response rate was 9.3 %. Vallen and Casado (2000) conducted a similar study, which surveyed the 500 largest lodging properties in each of the 50 United States. The number of returned valid questionnaires was just 9.0 %. Thus this response rate although low, can be considered standard.

This section provides a demographic profile of the survey respondents. About 67 % of the respondents were male while 33 % were female. The majority of the respondents were between 50-59 years old (29.2 %). The majority of the respondents were American (91.5 %). Fifty percent of the respondents had four-year college degrees while two-year college graduates represented 24.5 % of the respondents for second highest percentage in education. The majority of the respondents had more than 20 years of working experience in the hospitality industry (37.7 %) followed by 20.8 % with 5-10 years in the hospitality industry. Almost 36.8 % of the respondents had less than 5 years working experience in their current organizations followed closely by 35.8 % with 5-10 years. The majority of the respondents held an administrative position (90.6 %). Finally, the size of each property where the respondents worked ranged between 10 to 700 rooms, with an average of 158 rooms per property.

For research question one, questions one through nine consisted of yes/no type of questions regarding practitioners' knowledge and preparation of ethics education in the hospitality industry. When hospitality practitioners were asked *"Have you taken any courses or attended any seminars on ethics related topics within the last year?"* approximately seventy nine percent responded "NO" to the question. When they were asked *"Do you think any of these ethics courses or seminars have been of benefit to you?"* approximately twenty one percent responded "YES" to the question while 2.8 % responded "NO" to the question, and the rest of the respondents did not answer. When asked *"Does your organization currently offer ethics related courses or workshops for employees?"* approximately eighty one percent responded "NO" to the question. When hospitality practitioners were asked *"Have you taught any ethics related courses or seminars at your business within the last year?"* approximately 40 % (40.6%) responded "NO" to the question while 8.5 % responded "YES" to the question. The rest of the respondents did not answer this question. When hospitality practitioners were asked *"Have you dealt with current issues or situations related to ethics in the past year?"* eighty-three percent responded "NO" to the question. In terms of existence of codes of ethics in lodging organizations, 66 % of hospitality practitioners answered that they had a code of ethics in their organizations while 32 % indicated that they did not have a code of ethics in their organizations. Most of the hospitality practitioners (73 %) believed that business ethics can be taught. This result supports the literature review of this study.

For research question two, Table 1 illustrates the degree to which hospitality practitioners agreed with all of the six statements (questions 10 through 15) with regard to ethics education preparation for students, based on a Likert scale to denote their responses where 1 = strongly disagree through 6 = strongly agree. Among these six statements, most of the hospitality practitioners agreed that question 12 was the most important statement with regard to ethics education with a mean score of 5.09. This was the statement *"Business ethics is important and must be introduced to students before they work in the hospitality industry."* Thus, this result also supports the literature review of this study. In addition, among these six statements, most of the hospitality practitioners agreed that question 10 was the second most important statement with regard to ethics education with a mean score of 5.05. This was the statement *"Ethical issues should be addressed and discussed in all fields/areas of business on a regular basis."* This result also supports the literature review.

For research question three, hospitality practitioners agreed with all of the 12 statements (Grand mean = 4.44) with regard to business ethics being practiced in the hospitality industry based on a Likert scale where 1 = very ethical through 6 = very unethical. Among these 12 scenarios, most of the hospitality practitioners agreed that scenario five was the most unethical business practice with a mean score of 5.36. This was the scenario *"A hotel manager and an employee used a former colleague as the scapegoat for a mistake they had made themselves since no one could tell what had happened."* On

the other hand, hospitality practitioners believed that scenario three was the least unethical business practice with mean score of 3.09. This was the scenario *“A pregnant and single mother who relies on public assisted childcare to make ends meet has been late to work on numerous occasions because of the operating hours of the day care center. Other than chronic tardiness, her work had been well above average. The manager has written her up each time and has now decided to terminate her.”*

Table 1
Attitudes of Hospitality Practitioners toward Ethics Education Preparation for Students

	Mean	SD ^a
12. Business ethics is important and must be introduced to students	5.09	1.11
before they work in the hospitality industry.		
10. Ethical issues should be addressed and discussed in all fields/areas of business on a regular basis.	5.05	0.93
13. Business ethics courses help hospitality students with their future careers.	4.82	1.05
11. Educational hospitality programs should focus more on codes of ethics and start offering more relevant courses to teach students how to resolve ethical dilemmas.	4.71	0.91
14. Students who have studied business ethics make greater	4.42	1.18
contributions to the hospitality industry.		
15. Hospitality multinational companies (MNCs) are aware and understand local laws and ethical issues while operating businesses in foreign countries.	3.64	1.19
GRAND MEAN	4.62	1.06

n = 106. ^a = Standard Deviation. Likert-type scale where 1 = strongly disagree through 6 = strongly agree.

Factor analysis was conducted by grouping new factors to determine the dimensions among the 12 scenarios relative to hospitality practitioners' perceptions in ethical business practice. The Principle Component Analysis (PCA) with VARIMAX rotation was used to determine the underlying dimensions for representing practitioners' ethical business practice perceptions. These are (a) leadership honesty and integrity, (b) corporate reputation and customer satisfaction (c) manager's accountability and concern for employees, and (d) law abiding and ethical business practice. In order to determine the underlying dimensions, factors based on the Latent Root Criterion (Eigenvalues > 1), Total Variance Explained, Scree Plot, and VARIMAX (orthogonal)-Rotated Component Matrix were done using the SPSS analysis (SPSS, 2000). The Scree Test Criterion was used to show the latent roots (Eigenvalues) criterion of greater than one (1) for the factors. With respect to the managers' ethical business practice perceptions, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA) was .798. The KMO was used to determine the appropriateness of applying factor analysis; values above .50 for the factor matrix are appropriate. The Bartlett's Test of Sphericity value (Chi-Square) was 334.455, significant at p = .000 which showed a significant correlation among some of the variables (Hair, Anderson, Tatham, & Black, 1998).

RECOMMENDATIONS FOR HOSPITALITY EDUCATORS AND PRACTITIONERS

In conclusion, it is imperative for hospitality organizations and programs to offer ethics education and training for their hospitality employees and students. If this is the climate (ethical) they wish their employees to work in, then the material and topic must be delivered during their formative college years.

Based on the findings of this study, the following recommendations are provided for consideration:

- (1) Hospitality organizations should better utilize their codes of ethics. Hospitality practitioners believe that code of ethics have not been properly enforced in the hospitality industry. They also believe that their code of ethics may have tremendous influence on ethical behavior. This might be an avenue to help them educate employees relative to ethics.
- (2) Hospitality practitioners believe that hospitality students, hospitality educators, and hospitality employees may be more ethical in dealing with ethical dilemmas if students and employees have more education and training on business ethics. This belief should be put into measurable practice. Again, perhaps the existing codes of ethics would be a proper vehicle for this practice.
- (3) Hospitality practitioners would like to encourage more ethics education and training for the entire society.

- (4) Hospitality practitioners would like to encourage and demand more ethics education and training for hospitality students before they graduate. They believe that ethics education and training for hospitality students may have an impact on their long-term career development. This recommendation is in agreement with the literature review.
- (5) Hospitality practitioners advocate positive attitudes toward ethical practices in the hospitality industry. They agreed that ethical business practices should be encouraged and that this will improve the overall quality of the hospitality industry.
- (6) Hospitality practitioners suggest that (a) leadership honesty and integrity, and fairness and respect for others (b) corporate reputation, law abiding, and employee's loyalty, and (c) manager's accountability and concern for employees and customer satisfaction were significant factors in ethical business practices.
- (7) Hospitality practitioners have high concern and demand for ethics education and ethical employees in the hospitality industry. Thus, hospitality educators should implement ethics education for students so that better ethics knowledge employees can be expected in the hospitality industry.
- (8) Based on hospitality practitioners' suggestions, hospitality practitioners may have to advocate and implement higher standards relative to hospitality ethical issues and practices to satisfy customers.
- (9) Hospitality industry and hospitality programs may consider incorporating ethics across the curriculum and using scenarios and case studies to teach ethics.

LIMITATIONS AND FUTHER RESEARCH

Future researchers might replicate this study with current members of the International Council on Hotel, Restaurant, and Institutional Education (CHRIE). In addition, it could be contributory and meaningful to conduct the same research by surveying hospitality students. Ethics education is supported by this study, although the practice of ethics education has some voids. This study supports the literature review that this is a difficult and complicated issue. Most agree there is a need for education, and most desire an ethical environment, but in practice we need better implementation. In addition, according to the literature review and the findings, codes of ethics are crucial for implementing and improving hospitality employees' ethical behavior. Research relative to how to obtain, introduce, and implement codes of ethics to students and employees would be beneficial.

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TOURIST SATISFACTION WITH YUNNAN PROVINCE, CHINA

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ABSTRACT

As the rapid tourism development continues, many problems emerge in Yunnan Province's travel industry. Using data collected from a questionnaire survey, this article presents the findings of a research study determining the destination attributes critical to the overall satisfaction level of Chinese tourists visiting one of the four destinations in Yunnan Province, China. Their future intentions to revisit the same destination and to recommend the destination to friends and relatives are also investigated. Implications with regard to the sustainable tourism development in Yunnan Province are discussed.

Key Words: tourist satisfaction, Yunnan province

INTRODUCTION

Yunnan is situated on the plateau in southwest China. Tourist resources in Yunnan are diverse and abundant compared with most parts of China. The Province is well known for its unique ethnic customs, mild climate, magnificent landscapes and natural scenes. Of the 56 ethnic groups in China, 25 inhabit Yunnan and dwell a total of 70% of the Province's area. Through long historical evolution, these minority people have developed various folk customs reflected in their lifestyle, households, rites, foods and religions. The abundant resources attract hundreds of thousands of visitors every year. Tourism has been Yunnan's backbone industry since 1995, when the local government decided to capitalize on its advantages. Yunnan's tourism has witnessed rapid development, especially since 1999, when the international horticulture exposition was held in the provincial capital, Kunming. Over the past five years, Yunnan's tourism industry has grown at an annual rate of 30% (Yunnan Provincial Tourism Administration, 2002). In recent years, efforts have been given to upgrade tourism infrastructure. As a result, tourism facilities and associated facilities and services have been dramatically improved. With a number of tour routes open to the public, the Province is gradually establishing its image as a tourist rendezvous.

Problems, however, have emerged with the rapid development of tourism. The large number of tourists to the destinations increases the environmental stress and at the same time, the large-scale commercial activities are destroying the traditional culture and heritage (Duang, 2000). Traditional festivals, clothing, religion, handicrafts and folk art are facing serious threats. Ironically, income from tourism is rarely used on heritage or cultural protection. Market disorder and non-standardized service are some other issues. For example, travel agencies have increased dramatically in Yunnan Province recently with more than one thousand currently in operations. Most of the travel agencies are small businesses and thus vulnerable to competitions. This has led to price cuts and unpredictable service quality (China National Tourism Administration, 2003). As a result, many travel agencies cannot meet tourists' expectations and satisfy their travel needs. This research, therefore, attempts to examine Chinese tourists' satisfaction with their visits in Yunnan Province. The study has three objectives: (1) to investigate tourist's experience of Yunnan Province as a travel destination; (2) to identify trip elements they are satisfied with; and (3) to determine these elements' impact on visitors' overall satisfaction, likelihood to visit again and intention to recommend the destination to friends and relatives.

LITERATURE REVIEW

Today, tourism destinations begin to consider customer satisfaction as one of the most important sources of their competitive advantage (Bieger, 1998). In fact, an important activity of destination management is the periodic monitoring of visitor satisfaction and the regular resource stewardship involving an effective maintenance of those resources (Crouch & Ritchie, 1999). Through periodic tourists' satisfaction measurement, tour operators would benefit by gaining a better understanding of their customers before designing and promoting products for travelers. Different approaches to the measurement of customer satisfaction have been explored but a consensus approach has not been reached (Kozak & Rimmington, 2000). These approaches—expectation-perception gap model, expectancy disconfirmation theory, congruity model, and performance-only model—have been applied to studying satisfaction in travel and tourism (For example, Duke & Persia, 1996; Pizam & Milman, 1993; Chon & Alsen, 1991; Pizam et al., 1978). Overall satisfaction or dissatisfaction is the result of evaluating various positive and negative experiences. Therefore, the relative importance of each component to the overall impression, including both attractions and levels of service quality, should be investigated (Kozak & Rimmington, 2000). Studies have suggested that a tourism product's performance may be a more critical determinant of future purchase intentions and positive word of mouth than expectations or disconfirmation (Petrick et al., 2001).

Through many years of accumulation on satisfaction studies, tourism researchers have recognized that tourist satisfaction should take a multidimensional, multi-attribute approach (Hsu, 2003). Lounsbury and Hoopes (1985) also suggested that vacation satisfaction would be a function of satisfaction with specific aspects, such as accommodation, weather, food, transportation, and amount of money spent. Satisfaction research in tourism has evolved to indicate that overall customer satisfaction may be a multidimensional concept consisting of multiple sources of satisfaction. In Fuchs and Weiermair' (2004) study, the authors used the tourism value-chain-based destination satisfaction attributes. The results show that accommodation, restaurant, and shopping are highly important performance factors leading to either dissatisfaction or satisfaction, whereas attractions are labeled as basic satisfaction factors. In this study, the tourist satisfaction attributes were derived from the study conducted by Qu and Li (1997) on characteristics and satisfaction of mainland China visitors to Hong Kong. In their study, the tourist satisfaction attributes were ascribed into the categories of attractions, transportation, food, lodging, itinerary, shopping, tour group, and tour guide.

METHODOLOGY

A questionnaire was developed on the basis of the literature review. The questionnaire has three sections. In the first section, basic details about tourists were obtained. The second section is composed of 29 trip items (satisfaction attributes) that were considered to affect tourist's satisfaction level when traveling in Yunnan Province. Levels of satisfaction with attractions, facilities and services were measured on a 5-point Likert scale from *strongly disagree* to *strongly agree*. The third section of the questionnaire gathered information on (1) tourist overall satisfaction with the destination; (2) how likely the tourists were to revisit in the future; and (3) how likely they were to recommend the destination to friends and relatives. All three items were measured on 5-point scale.

The sample population for this study was composed of Chinese tourists who visited one of the four destinations in Yunnan Province between July 1 and August 1, 2003. Tourists participating in packaged tours were asked to complete the questionnaire. The four destinations, namely Kunming, Dali, Lijiang, and Xishuangbanna, were chosen because they are considered the most popular tourist attractions in Yunnan. Questionnaires were distributed by package tour operators from a number of local travel agencies. Respondents were approached and informed about the purpose of the survey in advance of being given the questionnaire. A total of 420 tourists agreed to participate in the survey. The data were analyzed by using SPSS.

RESULTS AND FINDINGS

The demographic profile of the respondents is shown in Table 1. The dominant age group of the respondents was 30-39 (47.4% of the valid sample), followed by 40-50 (26.3%) and 20-29 (22.9%). Majority of the respondents were male (61.8%). Most of the respondents received college or above education (87.8%), which shows that these respondents were well educated. In terms of the annual personal income, most respondents had an annual income between 20,001 and 30,000 RMB¥ (1 US\$ = 8 RMB¥).

A factor analysis was performed on the 29 trip elements identified from literature review and personal communication with local travel agencies in Yunnan. These items were seen as the travel attributes that would affect tourists' satisfaction level with the current visit. A principal component factor analysis with varimax rotation produced a five-factor solution (Table 2). Nineteen items were retained in the process. The five-factor grouping explained 60.2% of the

total variance. A Cronbach's alpha test was used to determine the internal consistency of each factor as well as the overall fit. All the coefficients were higher than .60 except the one for the fifth factor. The factors are labeled as tourist facilities (Factor 1), destination attractiveness (Factor 2), competency of tour guide (Factor 3), trip itinerary (Factor 4) and rapport of group members (Factor 5).

Table 1
Demographic Profile of Chinese Visitors to Yunnan Province

Variable	Frequency	Percent
Age		
Under 20	1	.2
20-29	94	22.9
30-39	195	47.4
40-50	108	26.3
Over 50	13	3.2
Education		
Less than high school	1	.2
High school diploma or equivalent	48	11.8
College degree	305	74.8
Post graduate degree	53	13.0
Income (RMB¥) (1 US\$ = 8 RMB¥)		
Less than 10,000	4	1.0
10,000 to 20,000	99	24.2
20,001 to 30,000	200	48.9
30,001 to 40,000	81	19.8
Over 40,000	25	6.1
Gender		
Male	228	61.8
Female	141	38.2

Note: Number of cases under frequency excludes missing observations

Table 2
Factor Analysis Results of Satisfaction Items toward the Destination in Yunnan Province

Subscales	Factor Loading	Eigen Value	Variance Explained	Reliability Coefficient
Factor 1 (tourist facilities)		2.457	14.454	0.736
Good service is provided by the room attendants.	0.7591			
Hotel rooms are equipped with good facilities.	0.7876			
Appropriate time is allocated to shopping.	0.6518			
A variety of shopping items are available with unique local flavor.	0.5046			
Quality of the shopping items is guaranteed.	0.4730			
Factor 2 (destination attractiveness)		2.453	14.427	0.752
The destination has high tourist value.	0.8451			
The view of the destination is good.	0.8293			
The development of destination well satisfy tourists' needs	0.7177			
The natural and humanistic assets of the destination are well preserved.	0.6184			
Factor 3 (competency of tour guide)		2.238	13.163	0.633
The tour guide provides interesting interpretation.	0.8020			
The tour guide has good command of knowledge.	0.7491			
The tour guide can motivate the group.	0.6345			
Enough time is allowed for free activities.	0.4310			
Factor 4 (trip itinerary)		1.565	9.206	0.660
The itinerary allows sufficient time for each phase of the trip.	0.8176			
The itinerary is well planned.	0.7882			
Factor 5 (rapport of group members)		1.529	8.993	0.546
Members in the group are friendly to each other.	0.7313			
Member in the group are getting along well.	0.7024			
Total			60.244	0.756

A series of two-stage least squares regression analysis was used to assess the relationship between one dependent variable (overall satisfaction, intention to revisit the destination and intention to recommend the destination to friends and relatives, respectively) and several independent variables. The five factors, together with the level of overall satisfaction, were the independent variables. Table 3 presents the impact of the five independent variables (travel attribute factors) on the level of respondents' overall satisfaction. It was observed that three independent variables—Factor 2 (destination attractiveness), Factor 3 (competency of tour guide), and Factor 5 (rapport of group members)—had beta coefficients that were statistically significant ($p < .05$).

Table 3
Factors Affecting Respondents' Overall Satisfaction with Their Visits to Yunnan Province

Variable	Standardized Beta Coefficient	<i>t</i>	Significance
Factor 1	0.002634	0.057	0.9547
Factor 2	0.096434	2.097	0.0382
Factor 3	0.300288	6.475	0.0000
Factor 4	0.081866	1.765	0.0783
Factor 5	0.098560	2.125	0.0342
Constant		200.545	0.0000

Note: Multiple $R = 0.3404$; adjusted $R^2 = 0.1051$; $R^2 = 0.1159$; $F = 10.7754$; significance $F = 0.0000$

The results presented in Table 4 suggest that only Factor 3 (competency of tour guide) and level of overall satisfaction were statistically significant indicators of Chinese tourists' intentions to visit the destination in Yunnan Province in the future ($p < .01$). Table 5 provides the results of analyzing the relationship between the five factors as well as the level of overall satisfaction and the degree of tourists' intentions to recommend the destination to friends and relatives. Only Factor 5 (rapport of group members) and the level of overall satisfaction had significant impact on the intention to recommend to others ($p < .05$).

Table 4
Factors Affecting Respondents' Intentions to Repeat their Visits to Yunnan Province in the Future

Variable	Standardized Beta Coefficient	<i>t</i>	Significance
Factor 1	-0.031394	-0.706	0.4807
Factor 2	0.052840	1.182	0.2380
Factor 3	0.146750	3.143	0.0018
Factor 4	-0.024073	-0.539	0.5900
Factor 5	-0.035169	-0.786	0.4321
Overall satisfaction	0.360960	7.631	0.0000
Constant		9.739	0.0000

Note: Multiple $R = 0.4347$; adjusted $R^2 = 0.1771$; $R^2 = 0.1889$; $F = 15.9174$; significance $F = 0.0000$

Table 5
Factors Affecting Respondents' Intentions to Recommend Holidays in Yunnan Province

Variable	Standardized Beta Coefficient	<i>t</i>	Significance
Factor 1	0.076393	1.594	0.1118
Factor 2	-0.078380	-1.626	0.1046
Factor 3	0.097901	1.945	0.0524
Factor 4	-0.029722	-0.618	0.5372
Factor 5	-0.102951	-2.136	0.0333
Overall satisfaction	0.147892	2.901	0.0039
Constant		9.716	0.0000

Note: Multiple $R = 0.2402$; adjusted $R^2 = 0.0440$; $R^2 = 0.0577$; $F = 4.1856$; significance $F = 0.0004$

DISCUSSIONS AND IMPLICATIONS

The study examined Chinese tourists' satisfaction with their visits in Yunnan Province using data obtained from a questionnaire survey. Results showed that Yunnan Province is popular among middle-aged tourists with college education

and mid income level. Results also demonstrated that respondents were most satisfied with the attitude of their tour guide, the scenery of the destination and the camaraderie of fellow travelers (getting along of the members in the tour group). Twenty-nine travel elements were grouped under five satisfaction attributes (factors). The results indicated that destination attractiveness, tour guide and rapport of tour group are significant to tourist's overall satisfaction level. Tour guide and overall satisfaction were found to influence the likelihood of revisit the same destination in the future. Rapport of the tour group and the level of overall satisfaction were found to be strong indicators of tourists' intentions to recommend the destination to friends and relatives. The destination's tourist value, beautiful view, tourists' need satisfaction, preservation of the natural and humanistic assets, tour guide's interpretation, good command of knowledge, and ability to motivate the group, enough time for free activities, friendliness of tour group members and getting along of the group members were items included in these satisfaction attributes that were critical for explaining the overall satisfaction of tourists and their future behavior.

The importance of the professionalism of tour guides should receive more attention from the destination management and tour operators. The two-stage least squares regression results suggest that a professional, entertaining and knowledgeable tour guide was very important to tourists' overall satisfaction and their intention to revisit the destination. Good working attitude of a tour guide also received the highest score among all the travel satisfaction elements. Tour guides are positioned in the front line of travel industry; and therefore represent the image of travel agencies and destinations. A professional tour guide harmonizes human relationships, bridges different cultures, and provides a memorable tour experience. He or she keeps the balance between the personalities and interests of different tourists, which is a success-determining factor of tourist satisfaction (Noam, 1999). Local destination management should develop effective training programs for tour guides to provide good services and interesting experience for tourists.

As the rapid growth of Yunnan's tourism industry continues, some environmental problems begin to appear in the famous and most visited destinations. Natural scenery and traditional heritages were damaged, to some degree, by tourist footsteps and commercial activities. Unplanned development may have a strong negative impact on the sustainability of tourism resources. It is, therefore, critical for Yunnan's tourism industry to enforce sustainable development strategic planning, implementing regulations of environmental protection, and increasing investment in tourism infrastructures.

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THE DETERMINANTS OF LIKELIHOOD OF REVISITING OF MAINLAND CHINESE VISITORS TO HONG KONG

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ABSTRACT

This study aimed to assess the service quality perceived by Mainland Chinese visitors in Hong Kong tourism industry. A questionnaire survey using systematic random sampling was conducted to visitors from Beijing and Hangzhou in 2003. A total of 573 valid questionnaires were included in the study and the descriptive and multivariate analyses were used to analyze the data. Eight dimensions of perceived service quality, labeled "Shopping", "Accommodation", "Tour Guide", "Local residents Attitudes", "Foodservice", "Value for Money", "Restaurants" and "Discrimination", were derived from the original 47 attributes. Seven determinants were identified as strong indicators of Mainland Chinese visitors' likelihood of revisiting.

Key Words: Service quality; Mainland China; Hong Kong; Likelihood of revisiting;

INTRODUCTION

Mainland Chinese visitors have played an important role in the tourism industry in Hong Kong over the past two decades. The number of Mainland Chinese arrivals has increased almost 39 times from 214,854 in 1984 to 8,467,211 in 2003 with an average annual growth rate of 23 percent. Currently, the China market contributes to 54.5 percent of the total tourist arrivals to Hong Kong, making it number one market by the number of visitors. Tourist receipts from Mainland Chinese visitors were up by 27.9 percent from HK\$ 26,776.33 million in 2002 to HK\$ 34,257.54 million in 2003, which ranked number one among all major originating markets to Hong Kong (HKTb, 2004). With the implementations of individual travel scheme in some cities of China in 2003, Hong Kong saw a rise of 78 per cent of Mainland Chinese arrival within a month (SCMP, 2003). However, the Chief Secretary for Administration Donald Tsang commented that the question is whether they will come back as repeat visitors who can contribute to Hong Kong's economy in the long run.

Although much has now been written on the development of tourism in China, not much attention has been given to the development process of China's outbound market, particularly in relation to Hong Kong. Given the significance of this market to Hong Kong, this study tried to explore: 1) individual Mainland visitors' perception of Hong Kong after their visit; and, 2) how these perceptions affected their future revisiting intention. Comprehensive understanding of this market will provide good reference points for Hong Kong government's policy making and industry operation, which would eventually help Hong Kong gain greater competitive advantages in attracting Mainland repeat visitors in the marketplace.

LITERATURE REVIEW

Measuring tourist satisfaction is an important task for tourism marketers to carry out as it is directly linked to repeat business. Its primary function is to provide information; information related to how well a destination is currently meeting its tourists' needs. With this information, marketers can focus their efforts on improving the quality of products or services, thereby enhancing the overall competitive advantages of the destination (Wong & Law 2002).

Traditionally, tourist satisfaction was defined as the result of the interaction between a tourist's experience at the destination area and the expectations he had about that destination. When he weighted sum total of experiences compared to the expectations results in feelings of gratification, the tourists is satisfied; when the tourist's actual experiences compared with his expectations result in feeling of displeasure, he is dissatisfied. This definition based on the well accepted expectancy disconfirmation theory. Developed in the product marketing, the expectancy disconfirmation model suffered from some defects while applying to the field of tourism. These defects might be due to that the theory overlooks the distinctive nature of tourism, such as the intangibility of tourist products, the multifaceted tourist experience, and the

simultaneous consumption and production process, etc. The expectancy disconfirmation model has been increasingly criticized in recent years and as a result, standard experiences other than expectations have been suggested (Goode and Moutinho, 1995).

This alternative approach that appears to be gaining acceptance is that satisfaction depends primarily on the customer's perception of service performance rather than on the disconfirmation between perception and expectation (Cronin and Taylor, 1994; Teas, 1993; Davis & Heineke, 1998). Perception is the process by which an individual selects, organizes and interprets stimuli into a meaningful and coherent picture of the world (Schiffman & Kanuk 1991). It is also "the impressions of people form of one another and how interpretations are made concerning the behavior of others" (Hargie 1986). Consumer perception carries a greatest weight in the various decisions made by tourists – the choice of a destinations, the consumption of commodities while on vacation and the decision to return. Many studies about the perception of residents towards tourism industry and inbound tourists have been conducted (Ross 1991; Lankford 1993), but it is equally important to understand the perception of tourists toward a destination.

In measuring the customer satisfaction or dissatisfaction (CS/D) with a destination, it is important to identify and include each component of the destination because the components lead to CS/D with the overall destination (Pizam, Newumann, and Reichel 1978). They also pointed out that tourism product was different from other consumer product, most of which are homogeneous and uniform. It is an intangible composite of many different interrelated components. It consists of many sub-products, activities and events, including accommodations, food and beverage purchases, excursions, and participation in recreational activities, entertainment and so forth. A primary way in which visitors form perceptions and make judgments about their hosts is interacting with service personnel (Wei, Crompton and Reid 1989, Reisinger & Turner, 2002). The customer's perception of this encounter is a crucial component in the evaluation of the quality of the service. Perception of local people is also a very important part of the total tourism product. They may enhance tourist holiday experiences and contribute to the success of the tourist destination. The tourist-host interaction can be analyzed in terms of the service encounter (Riley 1995).

The qualities of a tourism product or services that are provided in a tourist destination have major influence in overall tourist satisfaction (Akama & Kieti, 2002). Most previous studies only concentrated on people's perception or satisfaction towards one or two components in a destination. For example, tourists' shopping satisfaction in Hong Kong was examined by Wong and Law (2002). Niel, Kozak & LeGrys conducted research on the role of food service in tourist satisfaction (2000). Heung (2000) tried to evaluate the satisfaction level of Mainland Chinese tourists toward hotel service in Hong Kong. Geva and Goldman (1991) evaluated the tourists' satisfaction in guided tours. They found that tour guide's performance has important contribution to the tourists' satisfaction. Tourist satisfaction with an off-season destination has been studied by Kozak & Remington (2000). However, few studies have been conducted to examine the overall satisfaction of tourists toward a destination taking into account of their experience encountering services from different sectors during their stay.

METHODOLOGY

Instrument

A cross-sectional questionnaire survey was conducted to assess Mainland Chinese visitors' satisfaction level with those perceived destination attributes related to Hong Kong. The questionnaire consisted of four parts: 1) visitors' travel characteristics; 2) visitors' satisfaction level towards Hong Kong residents, local tour guides, accommodations and services, shopping goods and services and restaurant services. A five-point likert scale was used (1-very dissatisfied to 5-very satisfied); 3) visitors' revisiting intention, and 4) visitors' demographic profile. The satisfaction attributes were developed based on the review of literatures.

Data Analysis

Descriptive statistics were applied to all the questions in order to gain an understanding of the nature of the responses. A principal component analysis with varimax rotation was used to reduce the information contained in the original 47 service quality variables into a smaller set of new correlated composites of tourists' perceived service quality dimensions. The appropriateness of using factor analysis was confirmed by correlations, measures of sampling adequacy (MSA), partial correlation among variables, and reliabilities. The criteria for the number of factors to be extracted was based on eigenvalues, percent of total variance explained, significance of factor loading, and an assessment of variable structure. Only the factors with eigenvalues equal to or greater than 1 were considered significant. The solution that accounted for at least 60 percent of the total variance was considered satisfactory. A variable was considered of practical significance and included in a factor when its factor loading was equal to or greater than 0.45.

The dimensions, that were extracted from the factor analysis, were then used in a multiple regression model to identify the impact of each dimension in determining tourists' likelihood of revisiting Hong Kong. The regression model was hypothesized relating to the latent satisfaction dimensions as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_i X_i + \varepsilon$$

where,

- Y_1 - Dependent variable: Likelihood of revisiting Hong Kong;
- β_0 - Coefficient of the intercept;
- $\beta_1 - \beta_i$ - Regression coefficients of latent independent variables;
- $X_1 - X_i$ - Latent independent variables; and
- ε - Error term.

RESULTS

Visitors' Demographic and Traveling Profile

A total of 573 were used for the analysis representing a usable response rate of 87%. The proportion of males (56.1 percent) is a little bit more than females (43.9 percent). Over 67 percent of the respondents were aged from 26 to 45 years and 72 percent of the respondents were married (Table 1). More than 73 percent of the respondents held professional and/or management/administration positions. The residual of 26.3 percent represented as blue collar workers (10 percent), housewife (2.9 percent) and others (13.5 percent). More than 77 percent of the respondents had an annual income between \$2,500-\$12,000, only 9 percent had annual incomes over \$12,000, and 26 percent had incomes under \$2,500. More than 76 percent of the respondents were first time visitors and for 90 percent of visitors Hong Kong was their main destination. The primary purpose of visiting Hong Kong was for holiday and/or leisure (87.3 percent). Only five percent visitors were on business trip and about four percent were visiting friends or relatives. More than 93 percent of visitors joined either a total package or semi package tour and only 7 percent were on themselves. Almost 96 percent visitors stayed at local hotels.

Table 1
Demographic and Traveling Profile of Mainland Chinese Visitors

Age	%	Sex	%	Traveling Profile	
18 - 25	15.5	Male	56.1	Is it your first time to visit Hong Kong?	%
26 - 35	41.3	Female	43.9	Yes	76.8
36 - 45	26.5	Marriage	%	No	23.2
46-55	11.4	Single	28.0	Is Hong Kong your main destination?	%
56-65	4.6	Married	72.0	Yes	90.4
≥ 65	0.7			No	9.6
Annual Household Income RMB/US\$			%	What is your main travel purpose?	%
<RMB6,000/ ≈ <\$725			4.1	Holiday/Leisure	87.3
RMB6,000-19,999/ ≈ \$725-\$2,424			21.8	Business/Meeting	5.3
RMB20,000-49,999/ ≈ \$2,425-\$6,059			29.7	Visiting Friends	2.7
RMB50,000-79,999/ ≈ \$6,059-\$9,694			32.5	Visiting Relatives	1.2
RMB80,000-100,000/ ≈ \$9,695-\$12,120			15.6	Others	3.5
>RMB100,000/ ≈ >\$12,120			8.9	What tour package did you join?	%
Occupation			%	Total Package	85.6
Senior Executives/Management			40.0	Semi Package	7.4
Supervisor/Administrative Staff			33.7	By self	7
Blue Collar/Worker			10.0	Did you stay at a hotel?	%
Housewife			2.9	Yes	95.8
Others			13.5	No	4.2

Service Quality Dimensions

Principal component analysis was used to generate an initial solution. The eigenvalues suggested that an eight-factor solution explained 64.6 percent of the overall variance. The overall significance of the correlation matrix was $p = 0.000$ with a significant Bartlett Test of Sphericity Chi-square value of 12,556 ($df = 1,081$, $p = 0.000$). It showed that the data matrix had sufficient correlation to the factor analysis. The Kaiser-Meyer-Olkin overall measure of sampling adequacy

(MSA) was 0.935 which was meritorious (Hair et al., 1998). From the varimax-rotated factor matrix, eight factors with an eigenvalue ≥ 1.0 and a factor loading of 0.45 or higher were extracted from the original 43 variables.

Table 2
Dimensions of perceptions of Mainland Chinese Visitors to Hong Kong

Dimensions of Perception	Factor Loading	EigenValue
Factor 1: Shopping ($\lambda=0.82$)		16.121
Variety of goods and services	.681	
Quality of goods and services	.700	
Sales clerk attitude when I was looking and/or buying	.715	
Information and advice provided to me	.776	
Appearance and neatness of service personnel	.632	
Promptness of sales clerk in delivering their goods and services	.675	
Willingness of sales clerk to resolve my problems	.737	
Courtesy of the sale clerk	.723	
Service staff's efforts to understand my needs	.652	
Factor 2: Accommodation ($\lambda=0.74$)		3.549
Room facilities and amenities	.481	
Check in and/or check-out services	.636	
Room service	.753	
Appearance and neatness of service personnel	.645	
Promptness of service personnel in delivering their services	.690	
Helpfulness of service personnel	.712	
Courtesy of the hotel service personnel	.694	
Service personnel efforts to understand my needs	.592	
Factor 3: Tour Guide ($\lambda=0.86$)		2.683
The extend to which the itinerary was followed by the tour guide	.480	
Tour guide's product knowledge of Hong Kong	.616	
The tour guide's language skills	.757	
The degree to which your tour guide was clear of his/her commentary	.745	
Time management and punctuality of your tour guides	.518	
The professional appearance of your tour guides was well-groomed and neatly dressed	.557	
Willingness of the tour guide to resolve my problem	.665	
The courtesy of your tour guide	.616	
Tour guide's efforts to understand my needs	.545	
Factor 4: Local Residents Attitudes ($\lambda=0.90$)	.841	2.185
Hong Kong people are courteous	.877	
Hong Kong people are friendly	.778	
Hong Kong people are honest	.856	
Hong Kong people are helpful		1.992
Factor 5: Foodservice ($\lambda=0.75$)	.526	
Service staff's patience with me when I was ordering food and/or beverages	.614	
Knowledge of service staff with restaurant menu	.580	
Appearance and neatness of service staff	.571	
Promptness of service staff in delivering the food and/or beverage	.484	
Willingness of service staff to resolve my problem	.510	
Courtesy of the service staff	.451	
Service staff's efforts to understand my needs		1.432
Factor 6: Value for Money ($\lambda=0.77$)	.523	
Value for money for shopping goods and/or services provided	.556	
Value for money for accommodation provided	.536	
Value for money for the tour service	.542	
Value for money for the food and/or beverages		1.275
Factor 7: Restaurants ($\lambda=0.67$)	.639	
Variety of restaurants	.759	
Variety of menu items	.671	
Quality of food	.645	
Atmosphere of the restaurant		1.127
Factor 8: Discrimination ($\lambda=0.64$)	.817	
Hong Kong people appear to be rude to Mainland Chinese	.832	
Hong Kong people appear to discriminate to Mainland Chinese		
Total variance explained %		64.605

Kaiser-Meyer-Olkin Measure of Sampling Adequacy. 0.938

Bartlett's Test of Sphericity: Chi-Square: 12340.262; df 990; Sig. 0.000

This solution explained 64.6 percent of the total variance (Table 2). Reliabilities using Cronbach's alpha (α) was calculated to test the reliability and internal consistency of each factor. The results showed that the alpha coefficients for the eight factors ranged from .64 to .90, above the minimum value of .60 that is considered acceptable as an indication of reliability for exploratory research (Hair et al., 1998, p.118). The eight perceived quality factors were labeled "Shopping", "Accommodation", "Tour Guide", "Local residents Attitudes", "Foodservice", "Value for Money", "Restaurants" and "Discrimination".

Determinants of Likelihood of Revisiting Hong Kong

The summated scores of eight perception factors were used in the regression model to explain tourists "likelihood of revisiting Hong Kong". The results are listed in Table 3. In general, the model fits the data reasonably well with an adjusted R^2 of 0.23. This indicated that 23 percent of the variation of the dependent variable was explained by this equation. The F-ratio of 15.86 was very significant ($p=0.000$). The assumptions (linearity, constant variance, independence of the residuals, and normality) underlying regression and the influential data points (outliers) were examined by the analysis of studentized residuals, standardized residuals, studentized partial regression, and Leverage and Cook's distance in the study. All the tests were satisfied and there was no significant violation of the assumptions; also, no outliers were found in the model. The Dubin-Watson statistic value was 1.827, indicating that there was no residual correlation in the model.

Table 3
Determinants of Likelihood of Revisiting Hong Kong

R			R Square	Adjusted R Square	Std. Error of the Estimate
.494(a)			.244	.228	1.60514
Dependent Variable: How likely would you return to Hong Kong for another pleasure trip?	Sum of Squares	df	Mean Square	F	Sig.
Regression	326.902	8	40.863	15.860	.000(a)
Residual	1015.128	394	2.576		
Total	1342.030	402			
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	6.897	.080		86.259	.000
Factor 1: Shopping	.483	.080	.265	6.040	.000
Factor 2: Accommodation	.284	.080	.156	3.559	.000
Factor 3: Tour Guide	.363	.080	.199	4.539	.000
Factor 4: Local Residents Attitudes	.182	.080	.100	2.279	.023
Factor 5: Foodservice	.160	.080	.088	2.005	.046
Factor 6: Value for Money	.422	.080	.231	5.262	.000
Factor 7: Restaurants	.148	.080	.081	1.853	.065
Factor 8: Discrimination	-.332	.080	-.182	-4.161	.000

The t -statistic test was used for testing whether the eight independent variables contributed information to the predictor of the dependent variable "likelihood of revisiting Hong Kong." In this study, if the t -value of an independent variable was found to be significant at 0.05 level, that variable was considered in the model. Seven dimensions emerged as significant ($p \leq 0.05$) independent variables in the regression model. The model was written as follows:

$$\hat{Y} = 6.897 + 0.483x_1 + 0.284x_2 + 0.363x_3 + 0.182x_4 + 0.160x_5 + 0.422x_6 - 0.332x_8$$

where, \hat{Y} : Dependent variable "likelihood of revisiting Hong Kong";

x_1 : Independent variable "Shopping";

x_2 : Independent variable "Accommodation";

x_3 : Independent variable "Tour Guide";

x_4 : Independent variable "Local Residents Attitudes";

x_5 : Independent variable "Foodservice"

x_6 : Independent variable "Value for Money"; and,

x_8 : Independent variable “Discrimination”

Results of the regression analysis showed that there was a positive relationship between six dimensions and the dependent variable “likelihood of revisiting Hong Kong”. As expected, that dimension 8 “Discrimination” showed a negative relationship. It also suggests that the revisiting intention of a tourist largely depends on these seven dimensions. Therefore, they were the determining factors of a tourist’s intention to return and play important roles in a tourist’s decision-making. It could be concluded that when there is a higher satisfaction level in those seven dimensions, the likelihood of tourists coming back to Hong Kong will increase.

The partial correlation coefficient, β , was used to indicate the impact. The dimension with the greatest effect was “shopping” ($\beta=0.483, p = 0.000$), followed by “value for money” ($\beta=0.422, p = 0.000$), “tour guide” ($\beta=0.363, p = 0.000$), “discrimination” ($\beta=-0.332, p = 0.000$), “accommodation” ($\beta=0.284, p = 0.000$), “local residents attitudes” ($\beta=0.182, p \leq 0.023$), and “foodservice” ($\beta=0.160, p \leq 0.046$). Results indicated that, on average, a tourist’s “likelihood of revisiting Hong Kong” increases by 1.56 ($0.483+0.284+0.363+0.182+0.160+0.422-0.332$) for each unit change in the seven dimensions.

CONCLUSION AND LIMITATIONS

This study has attempted to assess Mainland Chinese visitors’ perceptions of the service quality provide by Hong Kong tourism industry. Given the limited empirical research done for this growing inbound market in Hong Kong, the findings of the study provided tourism practitioners with valuable information on Mainland Chinese visitors’ perceptions towards the service quality as well as their demographic and travel characteristics. The eight underlying dimensions of Mainland Chinese visitors’ perceptions of service quality could also serve as a basis for tourism marketers in identifying the key factors that may impact Mainland Chinese visitors’ overall perceptions with Hong Kong as a travel destination. This has confirmed the results of a previous study conducted by Kozak and Rimmington (2000) that facilities and services at the destination were important factors that had great impact on overall tourist satisfaction.

Among eight factors, “shopping”, “value for money”, “tour guide” and “discrimination” are found to have the greatest enticement on Mainland Chinese visitors’ likelihood of revisiting Hong Kong in the future. These four determinants may play a critical role for tourism operators in Hong Kong to better serve the Mainland Chinese visitors by identifying key factors that would entice the visitors to revisit and thus develop a long-term strategic plan to guide future marketing and promotion strategies for the Mainland Chinese market. A special attention must be given to local people’s discrimination against Mainland Chinese visitors.

The negative impact of the dimension of “discrimination” has the fourth largest impact on Mainland Chinese visitors’ likelihood of revisiting Hong Kong. Hong Kong residents and Mainland Chinese are both Chinese but different in many ways due to the difference of their social systems. Hong Kong tourism industry should accommodate their general needs and wants in terms of the service quality; at the same time a different marketing approach would be needed to reflect the differences of Mainland Chinese visitors by understanding the uniqueness of individuals from Mainland China. Without proper cross-cultural training and education for frontline employees in tourism industry and Hong Kong residents, it might be impossible to better serve culturally determined needs of Mainland Chinese visitors. The employees’ openness to different customs, awareness and respect to cultural differences, and abilities to handle culturally determined issues could be included in the cross-cultural training.

Two limitations of the study should be mentioned. Firstly, the sample was drawn only from visitors from Beijing and Hangzhou. Thus the findings are not generalizable and are limited to the sample that was studied. Secondly, this study was conducted a season in Hong Kong. The performance of services might be different in other seasons of the year.

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POST-TRAINING SELF-EFFICACY, POST-TRAINING MOTIVATION, AND TRAINING EFFECTIVENESS IN
HOSPITALITY ORGANIZATIONS

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ABSTRACT

Based on review of literatures, the paper proposed a conceptual model which illustrates post-training self-efficacy and post-training motivation as well as their impacts on training effectiveness. The model shows that training acquisition and job variables affect post-training self-efficacy, while job variables and perceived organizational support influence post-training motivation. Furthermore, the model states that both post-training self-efficacy and post-training motivation will affect training effectiveness. The research also suggests that post-training self-efficacy and post-training motivation might be interdependent.

Key Words: self-efficacy, motivation, post-training, training effectiveness

INTRODUCTIONS

Training theories and practices have improved dramatically (Salas & Cannon-Bowers, 2001), while hospitality organizations want to justify their huge investment in training by improved performance (Tracey & Tews, 1995). Self-efficacy and motivation were widely treated as critical causes of training effectiveness (Mathieu, Tannenbaum, & Salas, 1992; Quinones, 1995; Tracey, Hinkin, Tannenbaum, & Mathieu, 2001). The current study will focus on self-efficacy and motivation after training as well as their effects on training effectiveness. The interdependent interrelationship of post-training self-efficacy and post-training motivation will also be presented. For the purpose of the study, training effectiveness will focus on transfer of training. The conceptual model is given in Figure 1 (next page) and the propositions will be developed along the literature review.

Training and its Effectiveness

Training is “a planned effort by a company to facilitate employees’ learning of job-related competencies” (Noe, 2002 p. 4). The overall aim of any 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). Specifically, transfer of training contains generalization of training acquisition in workplace and maintenance of training acquisition overtime (Baldwin & Ford, 1988). The evaluation of training effectiveness included four levels/criteria: reaction, learning, behavioral and results (Kirkpatrick, 1996). A multi-dimensional view of learning or changes in cognitive, affective and/or skill-based outcomes was presented as well (Kraiger, Ford, & Salas, 1993). Utility-type reaction and affective-type reaction were also discussed (Alliger, Tannenbaum, Bennett, Traver, & Shotland, 1997).

Pre-training and Post-training Process

Pre-training, during-training, and post-training processes are distinctive components of training framework (Salas & Cannon-Bowers, 2001). Hence, factors within each process influencing training effectiveness should be estimated separately. The post-training process in the present study refers to the period from the end of training program to the whole stage of transfer of training. Salas & Cannon-Bowers (2001) stated that “events that occur after training are as important as those that occur before and during training” (p. 486). However, extensive research considered pre-training factors, but limited research focused on potential influences of post-training factors on training. The current study will present impacts of post-training self-efficacy and motivation on training effectiveness.

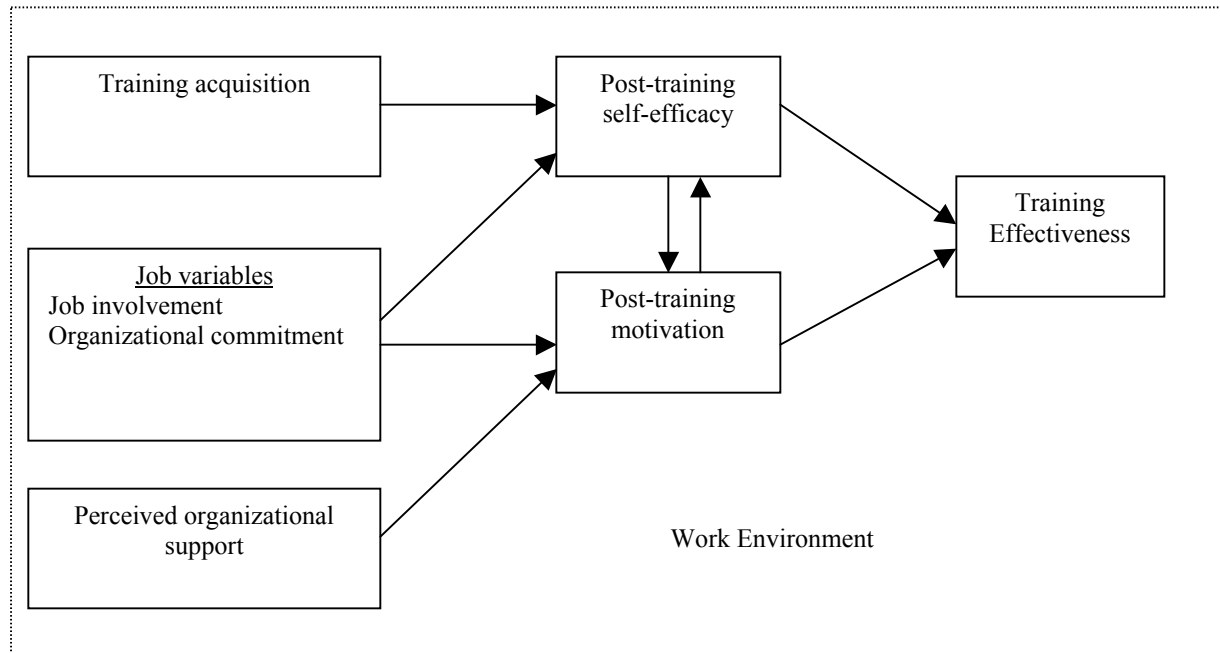
Post-training Self-efficacy

Self-efficacy refers to the perceived ability of an individual to engage in carrying out certain assignments to attain a specific purpose (Bandura, 1977, 1997). Self-efficacy mediates impacts of dispositional variables on learning performance (Salas & Cannon-Bowers, 2001). Accordingly, post-training self-efficacy has been defined in the current paper as: employees’ perceived abilities to perform training acquisition. Thus, it is based on acquisition of knowledge, skills, and abilities from training programs. Haccoun & Saks (1998) supported that “training increases self-efficacy and self-efficacy mediates the effects of training on training outcomes” (p. 39). We assume: (1) employees’ training acquisition will positively influence post-training self-efficacy (Proposition 1); and (2) Post-training self-efficacy will positively affect training effectiveness (Proposition 2).

Post-training Motivation

Training motivation has been defined as “the direction, intensity, and persistence of learning-directed behavior in training contexts” (Colquitt, LePine, & Noe, 2000 p. 678). Salas and Cannon-Bowers (2001) further emphasized that training motivation happens in “learning oriented activities before, during, and after training” (p. 479). Traditionally, training research focused on how methods and settings of training influence reaction, learning, and behavior change of trainees, and did not intensively demonstrate impacts of training motivation on training effectiveness (Tannenbaum & Yukl, 1992). Specifically, training motivation has motivation to learn and motivation to transfer (Colquitt et al., 2000). Thus, post-training motivation drives employees to perform the trained tasks in the workplace successfully (Haccoun & Saks, 1998). We thus expect: *higher post-training motivation will lead to greater training effectiveness (Proposition 3).*

Figure 1
The Conceptual Model



Job Variables

Job involvement and organizational commitment are two of job-related dispositional variables influencing training motivation (Colquitt et al., 2000). Job involvement is “the degree to which the job situation is central to the individual and his or her identity” (Blau, 1985 p. 34) and organizational commitment refers to the degree of attachment of an employee to an organization (Bartlett, 2001; Meyer & Allen, 1991). Employees with higher job involvement and greater organizational commitment might be more likely to feel strength and motivated to perform training acquisition valuable to job and organization (Tracey et al., 2001). Therefore, we expect: *job variables (job involvement and organizational commitment) will positively affect post-training self-efficacy and post-training motivation (Proposition 4).*

Perceived Organizational Support

Perceived organizational support has been defined as employees’ global beliefs that organizations recognized employees’ contributions and well-being (Eisenberger & Huntington, 1986). After training, work environment can be regarded as a climate for transfer (Noe, Hollenbeck, Gerhart, & Wright, 2000). Transfer climate can be supportive by encouraging and rewarding employees’ transfer of training acquisition (Fecteau, Dobbins, Russell, Ladd, & Kudisch, 1995). However, the results of Tracey et al.’s study (2001) support the idea that perceived organizational support might not have direct effects but mediated effects on training effectiveness by motivation. Supportive work environment will make employees motivated and then, training transfer will occur (Fecteau et al., 1995). Hence, we expect: *Employees who perceived greater organizational support will be more motivated to transfer training acquisition than those employees who perceived less organizational support (Proposition 5).*

The Relationship between Post-training Self-efficacy and Post-training Motivation

After training program, employees are expected to perform what they learn. In terms of transfer of training, employees should have both abilities to perform (can do) and desire to perform (will do) (Noe, 1986). Self-efficacy

presents the perceived ability of employees to perform acquisition, and motivation relates to the desire of employees to use acquisition. Tracey et al. (2001) presented that greater pre-training self-efficacy causes higher training motivation. However, the relationship may be recursive. If some employees are highly motivated or encouraged, they may believe they have stronger abilities to learn and to use what they learn, compared with other employees without motivation or lack of motivation. Consequently higher motivation after training may also lead to higher post-training self-efficacy. Overall, we expect: post-training self-efficacy and post-training motivation will be interdependent (Proposition 6).

IMPLICATIONS

In conclusion, the conceptual model in the present article tells us that post-training self-efficacy and post-training motivation are critical for training effectiveness. Effects of individual differences and work environment should also be considered within post-training intervention. The model contains several theoretical and practical implications.

The model extends training studies by focusing on post-training process, which is complementary to previous research on pre-training process. The approach distinguishes effects of post-training intervention from those of pre-training intervention. Thus, the current paper provides a potential to precisely estimate effects of pre- and post-training interventions. The model also reminds hospitality organizations that training is an organizationally planned process and requires full participation of every member in an organization. Hospitality organizations might build a supportive climate of training by paying sufficient daily managerial practices which build employees' commitment and job involvement. Reward systems should also provide incentives to encourage employees to apply training acquisition. Therefore, in general, hospitality organizations might need to not only provide best training programs but also establish supportive work environment in order to increase returns of training. Future researches might be interested if they examine an integrated model with both pre-training and post-training factors. Within such comprehensive model, various effects of pre-training and post-training factors might be precisely identified and might be more plausible both for training scholars and practitioners in hospitality organizations.

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