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**THE RELATIONSHIP BETWEEN PERCEIVED PERSONAL FAIRNESS,  
SOCIAL FAIRNESS, HOTEL CANCELLATION POLICIES AND  
CONSUMER PATRONAGE**

**by**

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A dissertation submitted in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy  
in the Department of Education Research, Technology and Leadership  
in the College of Education  
at the University of Central Florida  
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Major Professor: H.G. Parsa

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## **ABSTRACT**

The objective of the study was to examine the relationships between the concepts of personal fairness and social fairness and hotel cancellation policies. These relationships will be explored using the framework of Prospect Theory in terms of consumer patronage (willingness-to-purchase and word-of-mouth).

This study begins with a brief history of the development of the lodging industry in the United States from inns and taverns to the modern hotel industry that is a critical sector of the hospitality and tourism economy. Current statistics are provided regarding the U.S. and Central Florida hotel industry in order to provide both a national and local economic perspective. The study also provides relevant statistics regarding U.S. domestic traveller information.

The included literature review consists of concepts of mental accounting theory, economic utility theory, prospect theory, personal fairness, social fairness, and consumer patronage. The study also discusses how the lodging industry is unique in its implementation of reservation cancellation policies when compared against other industries. Research regarding merchandise return policies is also discussed here.

The study was designed to investigate three separate components of both personal and social fairness. The first component investigated the effects of hotel rate price increases and discounts on personal fairness when compared against an existing reference price. The second component studied the perceptions of social fairness on three established hotel cancellation policies. The third component introduces a treatment of distributive and procedural fairness violations as a moderator to observe the effects on consumer patronage for the same three hotel cancellation policies.

The data were collected from 415 hotel guests staying in Central Florida hotels near the Orlando international airport using an experimental method which provided different written scenarios regarding hotel pricing and three different hotel cancellation policies. The data was then analyzed using Analysis of Variance (ANOVA), MANOVA and Tukey's Post Hoc test to provide results that allowed the comparison of effects on each in terms of consumer patronage.

The study results indicated that that price increases against established reference prices had a significant negative effect on consumer patronage whereas discounts of the same magnitude had a significant effect only in the middle range. Included smaller and large discounts did not have a significant effect on consumer patronage outside of the middle range. The study results also indicated that there was significant difference in consumer patronage between an Open cancellation policy and a 48 Hour Cancellation Policy. There is a significant difference in consumer patronage when a No Refund policy is compared against both the Open Cancellation Policy and the 48 Hour Cancellation Policy. The study results also show that a violation of either Distributive Fairness or Procedural Fairness has a significant negative effect on consumer patronage for both an Open Cancellation policy and 48 Hour Cancellation Policy. However, when Distributive Fairness or Procedural Fairness violations are introduced as a moderator, there is no significant effect on a No Refund Cancellation Policy.

The study and its ensuing results are of importance to the academic community in that it provides additional scholarly support to both Prospect Theory and the theory of mental accounting and the roles that each plays in consumer behavior. From an industry practitioner perspective, the current results provide insight into hotel consumer's attitudes regarding rate increases/ discounts and the implementation of the three different hotel cancellation policies. The

results can be utilized to provide justification and guidance in altering or establishing hotel cancellation policies that hotel consumers consider to be fair.

This dissertation is dedicated to my family, both living and those who have left us. This includes my parents, grandparents, aunts/uncles, in-laws, wife and son. They have each played an important role in my life and have lifted me in both word and deed to this point in my life.

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Writing a dissertation is a lonely process. Yet, as John Donne wrote “no man is an island” and I can attest to this as many people stepped forward to help me along the way. I would be remiss if I did not take the time to thank these people who assisted me along my journey, and I would like to say I am eternally grateful for their help.

First, I would like to thank my friends from the industry. Both Dennis and Jacqueline allowed me the flexibility to work around my class schedule in the beginning of my academic career and allowed me to take a new path in my life. My doctoral degree would not have been possible without their support and encouragement in the early days of my graduate education which I began while employed full-time as a hotel manager.

Dr. H.G. Parsa deserves special recognition as the Chair of my committee, my toughest critic and most ardent supporter. He never gave up on me and displayed the patience of a saint as I continued to work through several “dead ends” until I focused upon the topic that I could build upon and provide a significant contribution to academic community. He taught me what it takes to be a true researcher, and any future success that I obtain as an academic researcher will be founded in his mentorship through this process.

I was blessed to have what I believe to be the best possible dissertation committee for my topic and without their help this would not have been possible. So, I would like to thank the committee composed of Dr. Chen, Dr. Nussair, Dr. Robinson and Dr. Schwartz. They all spent countless hours with me in identifying and refining my research topic. Each brought a unique perspective to this process and always encouraged me to produce my best possible work.



I would also like to express my appreciation to my mother and father who supported me from the very beginning. My mother proved time and time again in both word and deed that a mother's love will stop at nothing to help their child succeed. My father supported my every educational effort, and one of my clearest early memories was his insistence that I would go to college and obtain a first class education no matter what career I would choose for myself.

My son, Nathaniel is my inspiration to make the world a better place through education and hard work. His love of learning is infectious and inspiring. I could always look to him as an example of the excitement that comes with discovery and this helped motivate me to produce my best efforts.

Most importantly, I would like to thank my wife Lynn who always saw my potential and never once doubted what I could accomplish. Even in my early years as an undergraduate student who was searching for my place in the world, she believed in me and knew that I would "figure it out". She was the first to see what I was to become and never doubted my success. She also worked hard to keep our home a wonderful environment while I locked myself away each night to continue my studies. She is the love of my life and an eternal source of comfort and encouragement.

I am speaking from my heart when I say this dissertation could not have been possible without the selfless help and innumerable hours of assistance from Milos Bujisic, a fellow doctoral student and a good friend. Big thanks Milos for your big heart. I would like to thank Dr. Judy Holcomb who was with me every step of the way as a fellow student and a colleague. She always had words of encouragement and a sense of perspective that helped me get through the roughest times of the doctoral degree process.

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## **CHAPTER ONE: INTRODUCTION**

The lodging industry engages in the practice of revenue management with the goal of maximizing revenues and profits (Kimes, 1989). Hotel revenue management is the practice of the changing price of a room in response to an anticipated increase or decrease in demand (Schwartz, 2006; Upchurch, Ellis & Seo, 2002). Revenue Management has existed since the beginning of the hotel industry. The terms of trades are based upon an exchange upon what each item or service is worth. Certain items hold values that may be consistent between individuals or may vary greatly based upon what an individual's needs may be. When an agreement is reached upon the items to be traded then a transaction can take place. In the early days of commercial trade, several forms of revenue management practices were used. Many merchants and tradesmen held high quality food and goods aside from the commoners and presented them only to the nobility or the upper-class. The assumption is that their finer goods could be sold to "people of means" for a higher price. This law of supply and demand also governed the innkeepers of the times who were known to raise their prices for accommodations and food as their products became scarcer and the supply and demand fluctuated (Tranter, Stuart-Hill & Parker, 2009).

The airline industry was the pioneer of modern revenue management which evolved in conjunction with the advancements in computer technology during the 1980s (Avinal, 2004). Modern revenue management in the hospitality industry began in 1972 when BOAC airlines began to offer discounted airfares to some passengers while charging a full fare to the others in the same flight (McGill & Van Ryzin, 1999). BOAC's strategy for the allocation of discounted fares was to sell only an amount equal to the amount of seats that would remain empty if no discounts were available. Once this allocation was reached, only full-fared tickets would be sold

from that point forward (Bonne, 2003). This use of a two tier rate structure required the use of computerized inventory control system to track and regulate the discounted fares. This computerized inventory system has eventually evolved into the current revenue management system that is so commonly practiced in the lodging industry.

The other component that advanced revenue management was the deregulation of the U.S. domestic airlines in 1978. This deregulation moved control away from the Civil Aeronautics Board, who had previously set pricing policy for the airline industry and allowed the Free Market to determine and set airfare. This change from strict control of industry pricing to allowing airlines to determine their own prices brought about changes in competition. Prior to deregulation, rates were determined in centralized manner and they are set by the federal government. The Civil Aeronautics Board had to approve every fare and the process was consistently slow. This limited the airlines' ability to experiment with discount fares and to react to demand changes. After deregulation, airlines began setting their own prices and to change them frequently. This in conjunction with the development of computer reservation systems (CRSs) have allowed airlines the ability to keep track of the massive inventory of seats on flights over a several-month period (Beckman, 1958).

The combination of Airline Deregulation and the development of computerized reservations systems allowed American Airlines in 1985, the ability to develop a new discounting pricing strategy known as the "Super Saver Rate"(American Airlines, 2009). Airline revenue management was viewed as an innovative accomplishment and in turn inspired the development of revenue management systems for other areas of the service sector including hotels (McGill & Van Ryzin, 1999).



The creation of the Super Saver rate and other discount airline fares brought about additional policies that restricted customers from making changes or cancellations to an existing airline discount fare reservation. These restrictions typically took the form of cancellation fees and/or transaction fees. The rationale for these restrictions was based on a “quid pro quo” concept of a consumer incurring a penalty for a change or cancellation of an existing reservation in exchange for a discount from a standard rate. Although some customers did not understand this rationale in the beginning but they learned to accept it, and eventually it has become a standard practice in the airline industry. Over a prolonged period of acclimation, most airline customers have learned to accept that discount rates are tied to some form of restrictions (Kimes, 2002).

It can be said that generally the airline industry, prior to deregulation, maintained the policy of same price for all customers traveling on the same flight. But after the deregulation act of 1970s, in an effort to become more competitive, airlines developed revenue management systems offering differential fares (i.e. discount fares, standard fares) to customers taking the same flight. The differential fare systems were tied to some form of restrictions. One such example of a restriction, or a *fence* as it is referred to in the industry, is the required Saturday-night stay over rule. Many carriers required that all discounted rates would require the passenger to travel before a Saturday and return the following Sunday or later. This restriction was aimed at preventing the more lucrative business travelers from obtaining discounts as they typically travelled within the week and rarely incorporated any weekend stay-overs (Bonne, 2003).

Gradually consumers have learned to accept that the steeper the discount off of the standard fare, the greater the amount of restrictions were placed upon that airline reservation. This led to the development of the non-refundable or no change tickets, which locks the

consumer into the purchase at the time of the reservations and does not allow any changes to the itinerary without the payment of some type of penalty, such as cancellation fees or change fees (Bonne, 2003).

The prevalence, if not acceptance, of these cancellation/change fees has allowed them to become a standard practice (a business norm) in the airline industry. The U.S. Department of Transportation reports that these airline cancellation/change fees are estimated to be about \$2 billion dollars per year domestically (Mc Cartney, 2009). This report further states that in 2009, change and cancellation fees have contributed 3.2% of U.S. airline passenger revenue, totaling \$527.6 million. It is also reported that business travelers pay the lion's share of cancellation/change fees

Influenced by the use of effective revenue management systems of airline industry, in the 1980s, the lodging industry has slowly introduced the multitier room rate system and connected them with various discounts and restrictions. A recent investigation found that the rates available for the dates at a Philadelphia hotel varied between \$109 and \$209 per night(Consumer Reports, 2010). The investigator shopped for quotes from several different booking channels including the hotel's reservation line, web-site and several merchant sites that included, Hotels.com, Expedia, Orbitz, Travelocity and Hotwire, to obtain the different rates. This investigation shows that hotels engage in revenue management through the use of multi-tiered pricing.

In an effort to appeal to a greater number of customers, major hotel chains have instituted various policies regarding the making and the holding of hotel reservations. One such policy is the liberal cancellation policy put into effect that appeals to travelers who need to make changes to an existing reservation or even cancel it in rare occasions. This liberal cancellation policy

encourages travelers to make their reservations in advance. Because hotels have a limited inventory and the product is perishable, meaning that it cannot be stored for later consumption, advanced bookings are critical as a leading predictor of a hotels forecasted performance on any given night. Advanced reservations are an important element in helping to match demand with capacity which is one of the goals of hotel revenue management (Morrison, 2002).

In the past few years, hotels have become more restrictive with regards to the conditions that customers can cancel a confirmed reservation and avoid a penalty fee. Consumer Reports (Consumer Reports, 2010) states that a few years ago, customers had the option of canceling without penalty until 6.00pm on the day of arrival. Now some hotels require 48 to 72 hours' notice to avoid a cancellation fee equal to one night room rate and tax. There is a trend towards implementing stricter cancellation fees for hotels. This supported by an increase in the number of travel insurance claims brought about by consumers who are attempting to recuperate non-refundable lodging cancellation fees (Engle, 2009).

It is believed that the importance of the accurate rate and occupancy forecasting within the hotel community is a high priority to both owners and operators of lodging properties around the world (Lim, Chang & McAleer, 2009). Lim, Chang & McLeer. (2009) further state that accurate forecasting of a lodging enterprise's future performance allows for managers in all areas of the lodging operation to make important tactical decision with regards to staffing, budgets, expenditures and policy. Lodging enterprise ownership interest also depend upon accurate forecast to formulate short and long term business plans that depend heavily upon the expected revenues and cost associated with future performance of an operation (Law, 2004). The accuracy of forecasting in lodging operations has recently been emphasized as performance reviews and performance bonus programs have taken into account the forecast accuracy of hotel managers.

Currently a majority of hotels follow a liberal policy of allowing guest to place an option on a hotel room at the time of the reservation (Embassy Suites Hotels, 2010). By placing a hotel reservation a customer reserves the right to use the hotel room at a set price. At the same time, s/he also holds the right to cancel the reservation without any penalty. Technically, a hotel reservation is in fact a financial option written by the hotel and given to the guest (Quan, 2002). Unfortunately, this particular policy puts the hotel at a distinct disadvantage.

According to Quan (2002), “Since guests have the ability to cancel their reservations if they find a comparable service at a lower price, this use of reservations results in issuers (hotels) bearing the risk of unanticipated cancellations”. The economic disadvantage to the hotel that engages in this reservation policy is twofold.

1. If a hotel allows the guest to place the option to purchase a hotel room at a lower rate than the market, the guest will exercise the option and therefore get the room below the average market room rate. The hotel will have to honor this low rate, even though they could sell the room at a prevailing higher market rate, if they were allowed to break the option agreement.
2. Conversely, if the guest places an option (reservation) on a hotel room at a price that is higher than the average price of the market, guest are allowed to cancel the reservation without penalty and book elsewhere at a lower rate. Then that hotel suffers further as they may have been turning away other customers in anticipation of having the first guest exercise the reservation option and pay for the room. If this guest cancels the reservation close to the check-in date, the hotel may not have the ability to resell that room, thus suffers economic losses and also potential loss of guest satisfaction from those that were not declined earlier requests.

Thus, it makes more economic sense for hotels to follow the example of the airlines and migrate away from offering liberal reservation policies that place them at economic disadvantage in either case. Unlike the lodging industry, in the airline industry the demand exceeds the supply and the airline companies have greater leverage in their revenue management policies. But the current excessive supply of hotel rooms that exceeds the demand does not allow the hotels to

adapt those policies without making some modifications. For example, some hotels and resorts recently have adopted a pricing policy of requiring room reservations without the cancellation option. But an overwhelming majority of hotel chains such as Marriott, Hilton, Starwood, Holiday Inn etc. still allow the guest to place a reservation with an option to cancel the reservation without penalty. Unfortunately this liberal cancellation policy practiced by the hotel companies is negatively affecting the accuracy of the revenue forecasting of hotel revenue management systems. Thus, to improve the accuracy of the revenue forecasting systems, hotel companies need to address the issue of liberal reservation policies. Having guest hold options on reservations and then release them at a later date without a penalty greatly reduces a hotel's ability to accurately make precise accurate revenue forecasts (Schwartz & Cohen, 2004). Schwartz & Cohen (2004) discussed the importance in the accuracy of proper revenue forecasting in hotels. Success of the hotel management greatly depends on its ability to accurately forecast its revenues.

### **Historical Developments of the Hotel Industry**

#### **Early Beginnings of the Lodging Industry**

The hotel and lodging industry of today began as small, sparse single room accommodations that housed public officials or merchants that were forced to travel outside of their home communities. These accommodations can be traced as early as 2000 B.C. and are documented in the "Code of Hammurabi" (Rushmore & Baum, 2002). Within this code, there are specific regulations that are place upon the operators of Babylonian inns. These early inns were prevalent throughout the classical ages dominated by the Greek and Roman civilizations in

Western Civilization. These cultures were generally viewed as successful and prosperous and the creation of the leisure traveler was a direct result of this prosperity (Cold Water Creek, 2010).

### **The Development of the Inn**

With the fall of the Roman Empire around 476 A.D, this prosperity was greatly diminished and this ushered in the Middle Ages. Travel was also curtailed which in turn reduced the need for inns and public accommodations. One exception to this was the religious pilgrimages that required the holy obligation of travel for wealthy and prosperous citizens. This discouragement of travel in Europe existed up into the Industrial Age when the Industrial Revolution required societal changes. Inns began to proliferate in the industrial areas of England and were frequented by travelers whose vocations such as laborers, salesmen and merchants required them to adapt a mobile lifestyle ( Rushmore & Baum, 2002).

### **The Development of Public Houses**

These inns were formally known as *public houses*, but were commonly called *taverns or ordinaries* and were defined as establishments that provided both alcoholic and non-alcoholic beverages, food and lodgings for travelers for typically a modest sum. More often than not, these lodging accommodations were very meager and it was not uncommon for the entire collection of overnight guests to sleep together on a cold stone floor in a single common room. The majority of public houses were typically dwelling houses or other buildings that were converted into inns and as a result were not originally designed for high occupancy accommodations. This presented obvious problems with regards to sanitation, hygiene and even safety. The concept of “private” accommodations did not exist for any with the exception of the wealthiest of travelers. The above conditions discouraged many people from traveling away from the comfort of their own homes and this in turn discouraged commerce that was reliant upon travelling merchants.

## **Hotels in America**

The hotel is a unique American creation that is bound to its history and development as a nation. The development of the hotel as a unique entity was a direct reaction to all of the uncomfortable conditions that existed in the older inns and public houses. The need for overnight accommodations that were clean, safe and afforded some degree of privacy was catalyst that brought about the unique entity that is the hotel.

### **George Washington and Development of American Hotels**

Arguably, the development of the American hotel can be credited in large part to the first President of the United States, George Washington. Shortly after obtaining the presidency, George Washington envisioned a Grand National tour in which he would visit each of the thirteen newly created states and meet with the people. Historians have theorized that Washington's motivations centered on the need to promote the federal government and the newly created office of the president. Although George Washington enjoyed tremendous public support as the war hero of the revolution, the new republic was in its infancy and public visits to the larger towns would help to solidify individual communities into one nation.

The presidential tours of 1789-1791 accomplished this political objective and most American historians credit this bold move of the Washington administration to the early success of the young nation. In traveling, George Washington had made the conscious decision to take his overnight lodging in the inns and public houses. This policy was born out of the concern that accepting the hospitality of individuals in their private residences might give the off the appearance of favoritism or give the host a sense of entitlement for reciprocal favors. One has to admire the President's sense of commitment to this display of equality and humbleness in which he sacrificed his personal comfort for his closely held convictions regarding favoritism and

cronyism. It is well known of George Washington's discomfort and dissatisfactions with the public houses and they are well chronicled in his personal diary (Sandoval-Strausz, 2007).

In one entry, Washington wrote of this displeasure when he wrote ".....the only Inn short of Halifax having no rooms or beds which appeared tolerable and everything having a dirty appearance, I was compelled to keep on." Washington continued to document the lack of sufficient accommodations farther into his tour when he wrote "the accommodations on the whole road we found extremely indifferent - the houses being small and badly provided either for man or for horses" (Twohig & Jackson, 1979). This grand national tour although successful in its original purpose of helping to unifying the nation, it also called attention to the lack of comfortable accommodations available to travelers in early America (Sandoval-Strausz, 2007).

This is credited in large part to George Washington, who is considered the father of this country. Soon after ascending as the President of the United States, George Washington planned and accomplished an official journey through the thirteen states. His purpose was to acquire firsthand a knowledge of the fledgling country in the belief that if he was to govern effectively all thirteen states, he would need to be familiar with their people and customs. In 1789, Washington set out for a repeated grand national tour but as the President of a new nation. Unfortunately this tour has posed the same problem as before in the area of lodging. The accommodation problems still persisted.

This above experience must have affected George Washington as he later took steps as the young country's chief executive to facilitate the creation of nation's hotel industry. The decision was made to move the nation's capital from Philadelphia to the newly created Federal City, which is now known as Washington D.C. At this time Washington appointed Samuel Blodget Jr. as the supervisor of buildings and improvements for the capital in 1793. Blodget's



top priority was to construct the different assembly chambers for the houses of congress. His next highest priority was to build public accommodations for the members of congress and other officials that were required to spend extended periods of time in the newly built Federal City. Consequently the cornerstone for the Union Public Hotel was laid on the Fourth of July of 1793 and the design of the this public accommodation was unlike any previous public house as it was far larger than any inn or tavern that had previously existed in North America.

Unfortunately, the financing of the Union Public Hotel was poorly conceived as a lottery based project and the much needed funds were slow in coming. The result was that the construction ran far behind schedule and as a result other smaller boarding houses were built to serve the accommodation needs of the city. The Federal Government did see the project through completion and although it was never opened as a hotel, the grand building was converted into the first headquarters of the nation's post office. The building was also utilized by the government as the temporary housed of congress after the British burned down the original capital in the War of 1812. The Union Public Hotel, although never actually served as a hotel, it became the catalyst and inspiration for others to take the hotel concept and build upon it throughout the nation. This bold concept excited and inspired entrepreneurs to copy the design and create imitations that would succeed, thrive and become the hotel industry as we know it today.

### **Early American Hotels Promote Commerce**

It can also be said that in addition to making significant positive contributions to American history and the economy, hotels have played a significant part in both the social development and the welfare of the United States of America. In the book, *Hotel-An American History*, the author explains that the hotel is a point of contact between a local community and

the outside world (Sandoval-Strausz, 2007). The implications here are that hotels are one of a few businesses that help to facilitate other business enterprises. This is to say that hotels provide the lodging facilities necessary for business and leisure travelers to leave the comforts of their homes and makes the journeys that are necessary to facilitate commerce.

### **Early American Hotels Promote Societal Change**

Hotels also facilitate the mobility and transience that are a part of today's modern world, which in turn allow business between different enterprises to thrive. This point is further illustrated when one considers that prior to the widespread development of inns, which are the precursors to today's hotels, the majority of Europeans under the feudal system never traveled beyond their local village from birth to death. Many sociologists, urbanists and psychologists describe one of the factors of modern society being mobility and transience (Sandoval-Strausz, 2007). Hotels facilitate this mobility and transience by providing travelers with the required shelter, safety, food and other services required to encourage their movement. The early development of hotels in an American community of the past also represented its willingness to engage in commerce and hospitality with strangers outside of the community. In the past many communities choose to remain isolated from the outside world by not providing hospitality to strangers. Constructing a hotel within a community is a subtle message that the citizenry is encouraging strangers to visit and engage in commerce. This is a tradition that holds over even to this day. Some east coast beach towns actively discourage the construction of lodging facilities through rigid zone restrictions and building codes that make it all but impossible to build any facility that would be able to accommodate out of town travelers. The implied message is that the community prefers to limit the number of out of town strangers by limiting the accommodations available to these travelers.

Sandoval-Strausz (2007) also states the early American development of hotels is tied directly to the young nation's belief in democratic ideals. The underlying benefit of hotels allowed for the greater mobility of individuals to travel outside of their home community and exercise their personal freedoms. In early America, public officials discouraged the movement of individuals into and out of established communities. The belief was that strangers were to be viewed as suspicious and should be discouraged from visiting. Many towns set up laws that equated travelers with persons of suspicious backgrounds and set up systems under which they were to be scrutinized and observed for the protection of the local citizenry. The communities of Colonial America placed a high value on order and stability, and these travelers were seen as a direct threat to these ideas. This message is clear when one of colonies earliest historian, Edwards Johnson in 1654 wrote "Let not any Merchants, Innkeepers, Taverners and men of Trade in hope of gain, fling open the gates so wide, as that by letting in all sorts, you mar the work of Christ intended" (Johnson 1654 as quoted by Sandoval-Strausz, 2007). A result of these laws place an additional burden upon the innkeeper who was expected to be the guardian and sentry of the community against these undesirable wayfarers. This treatment of travelers as vagabonds and undesirables would change soon after America gained its independence from Great Britain.

### **The Current Hotel/Lodging Industry in the United States**

As noted above the lodging industry has a long history. People travelling have always desired a secure and restful place to spend the night (Hayes & Ninemeier, 2006). The lodging industry is primarily made up of hotels and to a lesser extent, other businesses such as bed and breakfast inns and timeshare/ vacation club condominiums that provide overnight accommodations for guests. Today's hotel industry is an integral part of the American economy. In 2008 alone, 49,505 hotel properties, with 4.6 billion individual rooms, have generated an estimated \$140.6 billion in sales. These lodging properties are owned by an estimated 30,000 distinct firms and sole proprietors (Kalnins, 2006). The largest lodging/hotel group in the world for 2011 was IHG (Intercontinental Hotel Group) which claims 647,161 rooms in 4,432 hotel properties (Hotel Online, 2009).

**Table 1: Top 10 Hotel Groups - 2011**

Hotel/Lodging Group	Number of Hotel/Lodging Properties	Number of Rooms	Brands Represented
IHG	4,437	647,161	Holiday Inns, Holiday Inn Express, Staybridge Suites, Crowne Plaza, Indigo
Hilton Worldwide	3,689	605,938	Hilton Hotels, Garden Inns, Hampton Inns, Embassy Suites, Doubletree, Homewood Suites
Wyndham Worldwide	7,152	605,713	Ramada Inns, Super 8, Microtel Inns, Hawthorne Suites
Marriott International	3,446	602,056	Marriott Hotels, Courtyard Inns, Fairfield Inns, Renaissance
Accor	4,229	507,306	Motel 6, Sofitel, Mercure, Ibis , Novotel
Choice Hotels	6,142	495,145	Comfort Inns, Quality Inns, Clarion, Sleep Inns
Starwood	1,041	308,7000	Sheraton Hotels, Westin, W Hotels
Best Western	4,015	307,700	Best Western Hotels
Carlson	1,078	165,061	Radisson Hotels
Global Hyatt	423	120,806	Hyatt Hotels, Hyatt Place

**(Hotel Online, 2011)**

### **The Central Florida Lodging Industry**

The Orlando lodging market totaled 117,665 hotel rooms at the end of 2011. These totals place the Orlando lodging market as the second largest in the nation. The only domestic market to exceed Orlando in the total number of hotel rooms is Las Vegas, which ended the year 2011 with an estimated 149,935 total rooms (University of Nevada Las Vegas, 2009). Despite the lagging economy, the Central Florida market realized an average occupancy of 64.7%, which represents a decrease of 2.3 percentage points over 2010's average occupancy of 66.2%. The average room rate for the Orlando market for 2011 reported by Smith Travel (2012) was \$93.56, which represents a 2.0 percent decrease or a \$1.907 decline in average rate from the previous year's ADR (Average Daily Rate) of \$95.46. The combination of available rooms and ADR is measured in REVPAR (Revenue per Available Room). Average REVPAR for the Central

Florida hotel market for 2011 was \$60.51 and represents a \$2.69 decrease when compared to 2010's REVPAR of \$63.20. From the above figures the simultaneous decrease in average daily rate and occupancy led to a poor performance in the market compared to the previous year. This is reflected in the decrease in REVPAR from 2011 from 2010 and it can be stated that hotels in the Central Florida Market generally have performed poorly in 2011 when compared to 2010 in the Central Florida market (Smith Travel, 2009 ).

### **U.S. Domestic Travel Statistics**

#### **U.S. Domestic Trips and Expenditures for 2010**

The US Travel Association collects and published relevant statistics with regards to travel both internationally and within the United States. This important industry association has collected travel and tourism data since 1973 and is considered to be one of the most reputable sources in providing U.S. tour and travel statistics. The USTA has forecasted that the Total U.S. Domestic Person Trips for 2010 was be approximately 1,945,300,000 trips. This generated an estimated \$640,000,000,000 in Total Travel Expenditures in the U.S. by U.S. residents (U.S. Travel Association, 2010). It is assumed that a large majority of the travelers stayed in a U.S. lodging operation and spent a significant amount of total travel expenditures on U.S. hotel stays.

#### **U.S. Average Domestic Trip per Person**

The US Travel Association estimates that in 2009, there were a total of 1,905,700,000 domestic person trips. The US Travel Association defines a trip as "One person trip of 50 miles or more, one way, away from home or including one or more nights away from home." (U.S. Travel Association, 2010). The estimated United States total population for July 1<sup>st</sup>, 2009 was

307,006,550 (U.S. Census Bureau, 2010). By dividing the total domestic trips by the total estimated U.S. population, it can be calculated that the estimated average annual trips is 6.20 per person. In 2008 there were an estimated 1,964,000,000 total domestic person trips. The estimated United States total population for July 1<sup>st</sup>, 2008 was 304,059,724 (U.S. Census Bureau, 2010). This yields 6.45 estimated average annual trips per person for 2008.

### **The Free Option Cancellation Policy as a Traditional Reservation**

Purchasing a hotel room varies from purchasing a typical tangible product. The purchase of the hotel room does not take place until the guest checks in at the Front Desk upon arrival. With a traditional hotel reservation, a guest places a hold on a hotel room for a future stay. With a traditional hotel reservation, the guest is actually placing an option to purchase the hotel room at that specific future date of check-in. Financial transactions that allow the purchaser the option to purchase or not to purchase without penalty at a future date are known as “Free Options”. This can be further defined in the hotel transaction as Free Option Cancellation Policy on a hotel reservation.

For the purposes of this study the Free Option Cancellation Policy was labeled as the “Traditional Reservation” policy. This has been labeled as a Traditional Reservation by the researcher to illustrate the point that it has been a traditional practice in the hotel industry not to charge for cancellations. Currently a majority of American hotels allow consumers to hold a hotel reservation for a specified amount of time and later cancel this reservation without any penalty. In contrast to the traditional policy of no cancellation fees, hotel reservation transactions that require consumers to pay some type of monetary penalty (either partial or full amount) for a cancellation will be hereafter defined as “Cancellation Penalty Reservations”.

## **Problem Statement**

Few empirical studies have observed the consumer's perception of either personal or social fairness for the reservations purchase transaction for hotels. Although research exist regarding the perceived fairness of revenue management practices for hotels, (Choi & Mattila, 2004, 2006; Kimes, 2002; Noone & Mattila, 2009; Rohlf's & Kimes, 2007), this available research has not investigated both the personal and social fairness aspects of the reservation transaction process.

The discounting of hotel rates has been explored in previous studies (Enz, 2003; Hanks, Cross & Noland, 2002; Kimes, 2002) however these studies have not utilized the concept of personal fairness as a measure of consumer patronage to determine their effect on consumer behavior. In addition, although these studies investigate the effect of discount hotel rates, they do not consider the relationship compared to a reference price in the mind of the consumer or any increases in the reference price.

Hotel cancellation policies are an integral component of the purchase decision and as there is no one standard policy in place for all hotels (Chen, Schwartz & Vargis, 2011), a deeper understanding of the effect of these various policies would be a benefit to both the hotel industry and the academic literature. A greater understanding of the impact of consumer perception of both personal and social fairness on consumer behavior in the hotel industry is highly desirable.



### **Purpose of the Study**

The purpose of this study is to identify and measure the gap in consumer patronage in terms of perceived fairness for both personal and social fairness. The first component of the study utilized consumer patronage in terms of willingness-to-purchase and word-of-mouth as the theoretical framework to investigate the perceived personal fairness of price increase and discounts when measured against an established reference price.

The second component of the study seeks a better understanding of consumer perceived social fairness towards various established hotel cancellation policies. To achieve this objective, existing cancellation policies were measured and compared in order to determine if there are any differences between them in terms of consumer patronage. This measurement may produce a hierarchal ranking which could be interpreted as consumer preference.

The third component introduced various violations of distributive and procedural fairness as scenarios to measure and compare differences in consumer patronage in the terms of willingness-to-purchase and word-of-mouth. These concepts of distributive fairness and procedural fairness were integrated into the model as moderators in an effort to help measure and compare the consumers' patronage with and without violations of fairness. As a result it is anticipated that the observed outcomes will identify what policies consumers prefer when perceived fairness is taken into account. By identifying consumer preferences, the effects of distributive fairness and procedural fairness begin to explain a consumer's preference for the various hotel cancellation policies. This in turn will provide the lodging industry with the information required to justify or modify these policies.

### **Significance of the Study**

The principal contributions of this study is to determine if customers prefer certain cancellation policies over others and if preferences are significant in terms of consumer patronage. As there are several different policies that hotels currently implement, it is important to identify which are preferable in terms of consumer behavior aspects so that the hotels can modify them accordingly in an effort to obtain a greater ability to obtain consumer patronage.

This study attempted to uncover the perceived value of these options so that the lodging can look to formulate effective cancellation studies. In addition this study hopes to establish a foundation for future studies that are necessary to fully understand the ramifications of these policies which are unique to the lodging industry.

### **Summary**

In summary, this chapter provided the background and history of the United States Hotel/Lodging was briefly discussed. In addition, the size and scope of the U.S. and Central Florida Hotel/Lodging industry was discussed in an effort to provide some perspective for the study's background.

In the next chapter, this study will explore and define the concept of revenue management within the industry and how the goals of revenue management justify the study and attempts to modify existing hotel cancellation policies. Furthermore the concepts of perceived fairness, willingness to pay and word-of-mouth are identified as key components of the studies model.

## **CHAPTER TWO: REVIEW OF THE LITERATURE**

The current chapter is intended to define the concept of revenue management within the industry and how the goals of revenue management justify the study and attempts to modify existing hotel cancellation policies. Furthermore the concepts of perceived fairness, willingness to pay and word-of-mouth are identified as key components of the studies model.

### **The Lodging Industry as a part of the Services Sector**

The lodging industry is a sub-category of the hospitality industry, which in turn is a part of the services sector (Armstrong, Mok, Go & Chan, 1997; Richard & Sundarum, 1994). The service industry is characterized by the four primary characteristics of services defined as: intangibility, heterogeneity, perishability and inseparability (Gronroos, 1978; Lovelock, 1980).

### **Revenue Management**

#### **Revenue Management and Yield Management**

Revenue management in general is a system of pricing a product, commodity or service and this price will fluctuate with increases or decreases in demand. Revenue Management is based on the perishability of a product or a service and the belief that it is more appropriate to provide a lower price to increase demand and thus accomplish a sales transaction rather than letting a product or service lapse into worthlessness after a given cut off point. Hotel rooms as well as airline seats fall into this category as both an unsold room and airplane seat has no value

after the night has passed or the airliner has departed. An unoccupied room does not produce any revenue, so a strategy of revenue management seeks to fill all hotel rooms and realize revenue from the transaction. Yield management is also defined as the practice of selling identical products or services for different prices to maximize revenues (Subramanian, Stidham & Lautenbacher, 1999).

### **The Practice of Revenue Management**

Revenue management refers to selling perishable goods and services to the most profitable mix of customers which will produce maximum revenues (Cross, 1997). Currently, the lodging industry engages in the practice of revenue management with the goal of maximizing revenues and profits. Hotel revenue management is the practice of the changing price of a room in response to an anticipated increase or decrease in demand (Mattila & Choi, 2005; Upchurch, et al., 2002) . Revenue Management has existed since the beginning of trade. The terms of trades are based upon an exchange upon the level of value of each item or service. Certain items hold values that may be consistent between individuals or may vary greatly based upon what an individual's needs may be. When an agreement is reached upon the items to be traded a transaction can then take place. In the early days of commercial trade, several forms of revenue management were practiced. Many merchants and tradesmen held high quality food and goods aside from the common customer and presented them only to the nobility or the upper-class. The assumption is that their finer goods could be sold to "people of means" for a higher price. This law of supply and demand also governed the innkeepers of the times who were known to raise their prices for accommodations and food as their products became more scarce (Tranter et al. 2009).

## **The Development of Revenue Management**

The study of revenue management began as researchers looked to develop statistical models that focused on maximizing capacity through overbooking (Beckman, 1958). Additional scholarly research tended to focus on operational functions through inventory control systems and the forecasting of booking limits (Gallego, 1997).

In conjunction with scholarly research, most observers agree that the hotel industry incorporated the use of revenue management techniques and model in the 1990's in an effort to maximize efforts to collect additional revenue. This usage has proliferated to the point where most major reputable hotel chains have invested heavily and incorporated revenue management pricing philosophy into everyday pricing decisions both at the corporate and individual hotel levels.

## **The Elements of Revenue Management**

Three identified elements of any revenue management system are to improve the accuracy of:

1. **Forecasting:** In service industries such as hotels and airlines, the rationed capacity limits place restrictions on a firm's profitability. An ideal model could establish accurate forecast counts and allow effective inventory control and booking limit policies.
2. **Inventory Control/Overbooking:** These models that are used to control inventory are based upon the assumption that certain customers will either opt to cancel or "no-show" and reduce a firm's profitability if no steps are taken to protect the ability to maximize capacity. Overbooking is an effective strategy practiced by both the airline and hotel industries. An ineffective overbooking strategy severely limits a firm's profitability either by underestimating these cancellations/no-shows where the capacity is underutilized or

providing compensation for confirmed reservation customers that are displaced because customer counts exceed capacity.

3. Price Fences: Rationing the available inventory to different market segments allows the enterprise to offer different price levels that combine to maximize revenue and increase profitability. The practicing of placing different prices at different levels of availability allows for a structured plan that maximizes the number of customers paying the higher rates while filling in the remaining seats/rooms with a limited amount of lower rate customers (Bobb, 2008).
4. Price Discrimination: The process by which a hotel charges a different price to different customers for an identical or near identical product/service such as a standard hotel room (Kimes & Wirtz, 2003).

### **Revenue Management in the Airline Industry**

#### **Revenue Management Development in the Airline Industry**

The airline industry was the pioneer of modern revenue management which evolved in conjunction with the advancements in computer technology during the 1980's (Kimes, 2002) (Avinal, 2004). Modern revenue management in the hospitality industry sector began in the early 1970's when BOAC airlines began to offer discounted airfares to some passengers that shared the same flights/cabins as other passengers that were paying full fares. The use of a two tier rate structure required the use of computerized inventory control to track and regulate the discounted fares. It was this computerized inventory system that developed into a revenue management system later. The other component necessary to advance revenue management was

the deregulation of the U.S. domestic airlines in 1977 (American Airlines, 2009). This allowed American Airlines the ability to develop a new discounting pricing strategy known as the “Super Saver Rate” in which the airline offered a 45 percent discount off of standard fares in exchange for a seven day minimum stay. In addition this special rate was limited to international travel and was not available for domestic travelers. The program was considered a success by the company in obtaining greater revenue and American Airlines further expanded the scope to their domestic market. In 1985 introduced the non-refundable “Super-Saver” rate in where the consumer was offered a 75 percent discount off of the standard fare in exchange for a pre-purchase, non-refundable restriction (Hanks, Cross, & Noland, 2002). Airline revenue management was viewed as an innovative accomplishment and in turn inspired the development of revenue management systems for other areas of the service sector including hotels (McGill & Van Ryzin, 1999).

### **The Role of Revenue Management Systems in the Airline Industry**

The creation and implementation of revenue management systems allowed the airlines the ability to utilize discounting as an effective strategy in helping to generate demand and increase sales. Specifically, American Airline’s SABRE system was a one of the pioneering technologies that allowed the company to track demand and utilize automated decision making to determine when and what discounts should be provided to incent customers to purchase fares. The revenue management component of SABRE forecasted demand into individual classifications called “buckets”. By utilizing these forecasting and optimizing techniques the system would determine how many seats were to be allocated to a standard rate bucket and how many seats would be allocated to a discounted fare bucket (Cook, 1998).

## **Airline Industry Revenue Management Practices**

This strategy of utilizing revenue management systems to determine the appropriate discounts was proven successful when implemented at American Airlines in conjunction with the SABRE system in the 1980's. This predates the implementation of revenue management systems by the lodging industry. It is estimated that American Airlines generated almost \$1 billion in annual incremental revenue (Cook, 1998). The implementation of discounting programs in conjunction with effective revenue management systems increased incremental revenue for American Airlines and in turn increased their profitability. The success enjoyed by American Airlines led to the widespread development and use of similar systems by national hotel chains and other enterprises that book perishable inventories in advance (Cook, 1998).

### **Cancellation Policies and Restrictions in the Airline Industry**

The creation of the American Airline Super Saver rate in 1977 began the use of offering customers discounted fares in exchange for certain behavior changing conditions with regards to the purchase transaction. The initial American Airlines Super Saver rate trade off was to provide the customer with a 45% discount off the standard fare in exchange for having the consumer book the flight 30 days in advance and meet a seven-night minimum stay requirement. Other discount airline fares brought about additional policies that restricted customers from making changes or cancellations to an existing airline discount fare reservation. These restrictions typically took the form of cancellation fees and transaction fees. The rationale for these restrictions was based on a "quid pro quo" concept of a consumer incurring a penalty for a change or cancelation of an existing reservation in exchange for a discount off of the standard rate.



Later in 1985, American Airlines introduced the “non-refundable” restriction to their Super Saver fares in exchange for up to a 75% discount off of the standard fares. The agreement between the airline and the customer would be that the traveler would commit to the reservation in exchange for the discount. This revenue management technique of providing discounts in exchange for tighter restrictions regarding customer returns on the transaction helped establish a foundation of requiring customers to relinquish their power in exchange for lower rates. This can be summed up in the phrase “give something to get something back”. The net effect of this new policy regarding Super Saver reservations would be to shift the actual purchase of the flight up to the time of the reservation instead of the later flight check-in. In essence, the Super Saver rate being non-refundable from the time of the reservation negated the “option to buy” the flight at a later time and committed the customer to purchase a hotel room by completing the financial transaction at the time of reservation. This successful change in the way American Airlines positioned their Super Saver rates was presented in the 1985 annual report which showed a decline in revenue per passenger mile, being offset by a revenue increase of 4.7% (Hanks et al. 1992).

Although customers did not understand this rationale for restrictions and penalty fees in the beginning, it has become a standard practice in the airline industry. The majority of airline travelers have come to understand and even accept that airlines will institute a penalty for a cancellation or charge to a confirmed reservation (Fram & McCarthy, 2001). Over a prolonged period of acclimation, most airline customers understand that discount rates are currently tied to these penalties and restrictions (Kimes, 2002).

After deregulation, in an effort to be more competitive, airlines developed revenue management systems which led to different fares (i.e. discount fares, standard fares) for

customers taking the same flight. The difference in fares were tied to restrictions and it was understood and accepted by the consumer that the greater the discount off of the standard fare, the greater the amount of restrictions were placed upon that airline reservation.

This practice of moving customers into a non-refundable, pre-purchase transaction would appear to be successful, when considering that most domestic airlines in the United States have copied to some degree the American Airlines Super Saver program in one form or another. It is estimated that in 1991, about 80 percent of all airline tickets were subject to some type of restriction and 75 percent of all tickets had some type of non-refundable/non-cancellation component (Hanks, et al., 2002). This suggests that the airline industry has made a successful transition in getting a majority of their customers to complete the purchase transaction at the time of the reservation and thus ensuring that the consumer pays a penalty if the ticket is cancelled.

### **Revenue Management: The Lodging Industry compared to the Airlines Industry**

The airline industry is considered to be the pioneers of revenue management (Kimes, 1989). The hotel industry has often followed the airline industry in regards to revenue management strategies and technology. Thus, in order for the hotel industry to increase its efficiency in collecting and fulfilling reservations, it will need to follow the example of the airline industry and migrate away from the use of option based policies. This means moving guests towards a policy that provides a firm commitment at the time of the reservation.

Airlines have been more successful in convincing consumers to accept that different passengers will pay different fares for the same flight than hotels could do with their customer with hotel rooms. Research suggest that customers who discover that they are paying a different rate for a similar hotel room can have a negative reaction (Kimes, 2002).

Research also suggests that different airline fares amongst passengers on the same flight is a commonplace and is accepted by consumers as an industry norm for doing business. The airlines enjoy this competitive advantage in part because of the lead time that is provided by being the pioneers in the area of revenue management, in addition to the limited availability (supply) of airlines to a destination compared to a hotel. It should be noted that airlines and hotels offer two distinctly different services to consumers and this could account for much of the difference in the perceived fairness of revenue management practices. The hotel industry should take note of the important history that the airline industry has provided in this area. By observing the successful strategies utilized by the airlines to have customers accept current revenue management practices, the hotel industry is provided with a “roadmap” in improving the consumer’s acceptance of their revenue management practices.

### **Identifying Business and Leisure Travel Motivations**

#### **Purpose of Travel**

For purposes of tracking the US Travel Association (USTA) classifies all U.S. domestic travelers as either Business Travelers or Leisure Travelers. It is important to note that people travel for many different reasons, however the USTA divides each of these into the dichotomous categories of business and leisure. It is also important to note that a single person can move from one category to the other within in the same year by engaging in multiple trips and having different purposes for the trips. Thus a traveler can be a leisure traveler this week for one trip and a business traveler the next week for another separate trip. The U.S. Travel Association projects that Leisure Travelers accounted for 77.2% of the Domestic Trips within the U.S. while Business

Travelers accounted for the remaining 22.8% of the trips. Leisure travel trips were forecasted to grow in 2010 by 1.90%, while business travel trips were forecasted to grow about 2.50%.

(Grossman, 1981)

### **Leisure Travelers**

Leisure travel relies upon the travelers need to engage in a service product that provides a pleasurable experience. In tourism studies, the specific reasons to travel for the leisure traveler have been identified as the following:

1. To experience new and different surroundings.
2. To experience other cultures.
3. To rest and relax.
4. To visit friends and family.
5. To view, or participate in sporting or recreational activities.

Further research identifies the four considerations that travelers list as factors in influencing their destinations. These are: entertainment, purchase opportunity, climate for comfort and cost. Typically a traveler will prioritize these factors and select a destination that aligns with their requirements (Cold Water Creek, 2010). Studies have shown that the most important attributes for leisure travelers' hotel selections were security, personal interaction and room rates (Lewis 1985; Marshall 1993). The implication here is that leisure travelers focus more on the room rates and value components in determining a hotel, than their business counterparts. The quality of service also is a strong determinant in hotel selection by leisure travelers (Hart, 1988). Leisure traveler studies also identified that security was one of the most important attributes in selecting a hotel when compared against business travelers (E. Fram, 1997). Also in contrast was the different priorities placed upon and hotel's reputation and

familiarity, where leisure travelers ranked security as a lower priority when compared to business travelers (Schmidt & Kernan, 1985).

### **Business Travelers**

Those who engage in business travel typically travel with a purpose other than leisure, although some travelers choose to add a leisure component to their agenda. The most common reasons for business travel have been identified as the following:

1. Meetings.
2. Corporate, regional, product and other sales trips.
3. Trade shows and expositions (Cold Water Creek, 2010).

Studies have shown that the most important attributes for business travelers hotel selection were cleanliness and location (Davis & Gerstner 1995; Longo, 1995). It is important to note that business travelers typically have a different motivation for travel when compared to leisure travelers and it is assumed that these differing motivations affected the responses given in the survey.

### **Customers Utilize Different Factors in Making Hotel Selection**

The price of a hotel room is one of the most important factors in having a customer determines if they will make a reservation for a particular hotel. However price is not the only factor and there are several other factors that consumers consider when making a reservation. Studies have found that frequent independent travelers also consider travel agent recommendation, location and service to also affect their decision to book. Business travelers consider previous experience with the hotel, convenience, service and company recommendation

to be important factors in determining their decision of which hotel to select (Chan & Wang, 2006).

Customers utilize several different factors, including price in helping to determine which lodging property best suits their needs. It is assumed that travelers also take into account the hotel's cancellation policy when making a hotel selection. In the past, hotels have modified their cancellation policies in reaction to the demand for lodging services. An example of this would be the tightening of cancellation policies during high demand events such as the National Football League's Superbowl event or the Daytona 500 automobile race.

### **Mental Accounting**

The objective of this study is to utilize Thaler's (1985) mental accounting theory as a framework upon which to study the values that both consumers and hotel professionals place upon cancellation policies. Mental accounting theory is based upon and attempts to explain the differences in choice under prospect theory.

#### **Prospect Theory as a Foundation of Mental Accounting**

Prospect theory is an attempt to predict and explain why consumer choices violate the established economic principal of Utility Theory. Utility Theory states that consumers base their purchases of a product or a service on the expected utility they expect to receive from that purchase (Von Neumann & Morgenstern, 1944). Consumers do not always act in the predicted manner described by utility theory. As a result of this observation an alternative model of economic behavior was proposed in order explain this consumer behavior when compared to the utility theory which is based upon normative theory.

### **Normative Theory**

In general economic terms, the normative theory expresses what a rational consumer should do. This is typically expressed as the most optimal option available to the decision maker. It is based upon a rational maximizing model and describes how consumers should choose. It assumes that a fully informed consumer will identify and make the best decision available based on accepted economic theory. Many economist that rely heavily on normative theory make errors when attempting to predict consumer behavior and discover that consumers do not always select the optimal option (R. Thaler, 1980).

### **Descriptive Theory**

In general economic terms, the descriptive theory attempts to describe how consumers do choose a course of action. This course of action is not always the optimal option available and runs counter to what the normative theory provides as a selection. A common description for both theories and their interaction is that the normative theory describes what consumers *should do*, while the descriptive theory explains what consumers *would do*. In some situations the consumer selects the optimal option and the normative and descriptive theory concur. The majority of research conducted with regards to differences between normative and descriptive behavior generally observes that the less complex the decision to be made and the fewer options available tend to generate an optimal decision and allow the normative and descriptive theories to coincide. Conversely, decisions that are complicated tend to produce a difference in normative and descriptive behavior (Ladhari, 2007)

### **Differences in Normative and Descriptive Theory**

Differences in normative theory and descriptive theory can be explained by the concept of bounded rationality. Bounded rationality as “the capacity of the human mind for formulating

and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behavior in the real world- or even for a reasonable approximation to such objective rationality” (Simon, 1957). When an individual’s rationality is bounded by complicated problems, their deductive reasoning and logical apparatus ceases to cope (Arthur, 1994; March, 1978). Thaler (1980), further defines bounded rationality as a form of economic mental illusion in terms of consumer behavior.

### **Prospect Theory**

### **Utility Theory**

Expected utility theory was presented by Von Neumann and Morgenstern (1944). In economic terms, the concept of utility is defined as a measure of relative satisfaction (Von Neumann et al., 1944). Marshall (1920) states: “Utility is taken to be correlative to Desire or Want.” As a measurement of desire or want is difficult to quantify, they are typically represented in economic models in terms of quantifiable values. Marshall further states: “It has been already argued that desires cannot be measured directly, but only indirectly, by the outward phenomena to which they give rise: and that in those cases with which economics is chiefly concerned the measure is found in the price which a person is willing to pay for the fulfillment or satisfaction of his desire. (Marshall, 1920)

As the utility theory is considered to be based upon the normative theory, economist doubted its value as a descriptive model (Allais, 1953). As stated above, consumers do not always act in a rational, predictable manner, which is expected in a normative model. In an effort



to correct this problem, Kahneman and Tversky (1979) constructed an alternative descriptive model of economic behavior that is known as prospect theory.

### **Utility Theory and Prospect Theory**

Psychologists, Kahneman and Tversky (1979) observed that consumers did not always act in their best interest in economic terms and that many of a consumer's actions ran contrary to the logical decision available. In an effort to explain this phenomena, the researchers introduced psychology into the consumer decision making process in an effort help explain illogical outcomes. By utilizing psychology in observing consumer behavior, prospect theory has further advanced the science of economics and many economists utilize it into modern theory. This can best be described as utility theory addresses how decisions should be made, while prospect theory observes how decisions are actually made. Although different in approach, prospect theory is closely related to expected utility theory (Tvede, 1999).

Prospect Theory was developed as an alternative to the expected utility theory as a means of describing consumer behavior. Kahneman and Tversky (1979) observed that people treat perceived losses differently than perceived gains. These are defined as decision weights and appear in the decision making process of consumers. This decision process views decision weights in terms of gains or losses as opposed to the final value of the asset (Kahneman & Tversky, 1979). An example within the lodging industry could be a hotel that charges a minimal fee for a reservation cancellation. A consumer places a reservation for a room at the rate of \$100 that includes a \$5 fee for a cancellation. The same consumer later finds a similar hotel at an \$80 rate. Under the Utility Theory, the consumer would readily cancel the first reservation incurring a \$5 penalty fee, but would reconcile this by realizing a \$20 savings with the discounted \$80 rate. Prospect theory says that the consumer would be less likely to cancel the old reservation

and book the discounted \$80 rate because in the consumer's mind, they have "lost" the \$5. Economically it makes sense to lose \$5 to receive a savings of \$20, but the consumers' mind, they cannot reconcile spending \$5 and not receiving a good or service in return immediately in the same transaction.

### **Empirical Generalizations Proposed Through Prospect Theory**

Prospect theory addresses the way consumers label outcomes in transactions involving risk. This is accomplished by framing decisions in a different manner which is accomplished by coding outcomes. This affects attitude toward risk. Kahneman and Tversky (1979) observed that consumers do not assess risky gambles following von Neumann-Morgenstern's utility theory. They instead assess risk by considering gains and losses relative to some reference point and not at the levels of final wealth they can attain.

Prospect theory replaces the concept of utility with one of value. In economic terms, utility is typically defined and measured in terms of net wealth. However, value is defined in terms of gains and losses by deviations from an original reference point. In addition, Kahneman and Tversky (1979) found that the value function for losses is different than the value function for gains. They state that the value function for losses is steeper than that for gains, losses "loom larger" than gains.

Kahneman and Tversky (1979) summarize their findings as follows:

1. Consumers treat gains differently than losses.
2. Loss aversion, under prospect theory, considers the possibility of a gain differently from that of a loss. This can be characterized as losses hurt more than gains satisfy. If the consumer is faced with a risk where the outcome could either produce an equal gain or loss, the consumer will focus on the risk and loss aversion will discourage taking the risk.

3. Outcomes received with certainty are over weighted relative to outcomes that are uncertain.
4. The way in which the situation is structured can affect the choices.

## **Fungibility**

### **Principles of Fungibility**

A key concept that helps define consumer theory is the concept of fungibility. Fungibility is the assumption that one can easily substitute a good or commodity for another of the equal or greater utility good or commodity. This is different from liquidity which deals with the exchange of one good or commodity for a different good or commodity. Fungibility states that money has no labels and in this context refers to the observation that currency can be easily exchanged for other currency of the same value (R. Thaler, 1980). An example might include a person exchanging a ten dollar bill for two-five dollar bills. Fungibility allows for this exchange of equal amounts although the individual (not total) face value and number of bills differs for each side of the transaction. The fungibility of money would treat a 100 dollar winning lottery ticket the same as a 100 dollar bank savings account. The principle of fungibility allows for the mutual substitution of goods or commodities that are similar in nature. (R. H. Thaler, 1990).

Commodities such as crude oil or orange juice are considered to be fungible, as there is no distinguishing characteristic to separate one gallon of crude oil/orange juice from another. Each diamond is said to be unique and differences are found in size, color and cut. Diamonds are to be considered non-fungible because of this uniqueness.

### **Mental Accounting Violates the Principles of Fungibility**

Thaler contends that consumers do not always follow the concept of fungibility. The mental accounting theory is an attempt to rationalize this behavior which when viewed from an economist perspective, is irrational. The research with regards to mental accounting suggests that consumers categorize their money into different classifications and keep them separate from each other. If all consumers followed the principles of fungibility they would behave in a manner that considers their entire sum of monetary funds available instead of segmenting the total into smaller funds and making decisions based on these smaller segmented funds.

A classic example of this segmentation is the Christmas account. This is a bank account that many people keep as a separate collection of funds outside of their general savings account. A Christmas account is fungible when compared with the standard bank account that the same consumer maintains. No special benefits, such as a higher interest rate are realized by separating these funds into the two separate savings accounts. Many consumers utilize these Christmas accounts in an effort to hold these funds away from the general savings/checking account so that they will not be tempted to utilize the funds to make standard daily purchases or pay bills. A common phrase could be used to describe the situation as “out of (financial) sight, out of mind”. This behavior ensures that funds will be available to make gift purchases around the holiday season, even if this typically means that other purchases or the payment of bills is delayed.

## **Endowment Effect**

### **The Endowment Effect and Status Quo Bias**

The endowment effect was first proposed by Thaler (1980) to describe his supposition that all cost should be viewed as opportunity cost. The opportunity cost should have an out-of-pocket value placed upon them. Removing a good from an endowment creates a loss in the mind of the customer, thus proving that it has value in the mind of a customer. With regards to endowment effect, studies show that decision makers exhibit a significant status quo bias (Samuelson & Zeckhauser 1988). This can be interpreted as consumers preferring the status quo of previous arrangements and any attempts to alter the status quo would meet with resistance.

Mental accounting suggests that consumers place a value on the status quo of an arrangement between consumers and the service provider. If a buyer and a seller have conducted previous transactions and established a status quo through a series of transactions, it can be assumed that the buyer can assume the endowment effect for any future transactions. If the seller intends to alter the status quo of any future transactions, they run the risk of the buyer discontinuing the relationship if the utility value of the transaction is perceived to be too great of a cost for the buyer.

### **The Principle of Dual Entitlement**

Researchers have shown that most customers adhere to the concept of dual entitlement. Kahneman, Knetsch and Thaler (1986) state that customers believe that they are entitled to a reasonable price, while the firm from which they are conducting business, is entitled to a reasonable profit. They further state that:

- 1) A firm has the right to raise its price for a good or a service, as long as this is done to maintain the current level of profits and does not violate the reasonable price entitlement for the consumer. This typically occurs when the expenses for the firm are increased and the cost is passed on to the consumer.
- 2) A firm does not have the right to raise its price to increase the profitability, when all other cost associated with the service or good have remained constant.
- 3) If the cost of the service or good decreases for the firm, the reduced cost does not have to be passed on to the consumer and it is fair to maintain the same price (Kahneman et al. 1986).

### **Personal Fairness**

In academic literature, personal fairness is also referred to as personal justice. Although the terms are synonymous, Personal Fairness tends to be more prevalent in consumer behavior studies whereas Personal Justice appears mostly in legal research.

Personal Fairness is a concept that is based upon a personal preference and tends to produce feelings of unhappiness or dissatisfaction. The price of an item traditionally falls into the category of personal fairness. A consumer typically maintains a reference price for a certain item and if a seller exceeds this reference price, the customer experiences relatively minor distress or satisfaction when compared to a violation of social fairness (Sarah Maxwell, 2002). The unfairness of the higher than expected price affects that particular consumer only. When there is a perceived violation of the social fairness prescriptive norms

the emotional response is relatively stronger than the reaction to personal fairness. (S Maxwell, 2008).

An example of a violation of personal fairness would be a customer going to buy bottle of water in the theme park. Based on past purchases from convenience store, the customer's reference price may be \$1.00 and this is what they anticipate what they will pay. The theme park however charges \$2.00 for the same bottle of water. This higher than anticipated cost for a bottle of water is considered to be a violation of personal fairness. The customers now have a decision to make whether they should purchase the water even though it violates their concept of personal fairness.

A lodging industry related example of this would be a customer calling to make a reservation at a hotel they have stayed at before for \$100 a night, and then being quoted a rate of \$200 per night. This higher than expected rate quote violates their personal fairness as it exceeds the consumers' reference price. The consumer may then decide to search elsewhere for their lodging product if this violation exceeds the limits of their tolerance. This study attempts to provide an experimental scenario to determine how changes in quoted prices compared to an established reference price affects consumer patronage.

### **Customer's Perceptions of Fairness are Influenced by Previous Prices and Policies**

Previous studies indicate that a customer's perception is heavily influenced by a firm's status quo and previous actions. This leads to consumers to establish an Expected Price (EP) in their minds and is sometimes referred to as a reference price. With regards to pricing and revenue management, a customer will use previous policies as a reference point and use them in comparison to any changes engaged by the firm (Kahneman et al., 1986). Customers also view current policies as an entitlement and any changes to current policies receive close scrutiny.

Many consumers assume that all factors being equal, a Quoted Price (QP) should be relatively equal to their Expected Price (EP). A customer's reaction to changes in the status quo ranges anywhere from acceptance to violence. This occurs when the Quoted Price exceeds the Expected Price ( $QP > EP$ ). Violence is a very rare reaction and most customers who do not favor the new policy or price typically will express their displeasure through moving their patronage to another firm or simply stop doing business with the firm that initiated the change (S Maxwell, 2008). Maxwell (2008) also indicates that when the Quoted Price is at or below the Expected Price ( $QP \leq EP$ ) the conditions for personal fairness are met.

### **Patronage**

#### **A Relationship between Patronage, Word-of-Mouth and Willingness-to-Purchase**

Patronage is defined as a commitment to a firm in terms of return and repurchases behavior. Patronage is shown to positively affect word-of-mouth in both traditional retail and online customer relationships (Van Riel, Semeijn & Pauwels Rafiq, 2005; 2004). Patronage is also expressed as a factor in customer loyalty. Customer loyalty to a firm can be said to positively affect the likelihood of future patronage and in turn generates exceptional value to a firm through positive word-of-mouth and willingness-to-pay a premium price for goods or services (De Witt, Nguyen & Marshall 2008; Ladhari, Brun & Morales 2008). A relationship also exists between re-patronage intentions and word-of-mouth in that both decline with customer dissatisfaction (Blodgett, Granbois & Walters, 1993).



### **Willingness to Purchase**

Willingness-to-purchase (WTP) is defined as the measure of how likely a consumer will engage in a purchase transaction and is based on an equitable distribution of benefits. Also referred to as willingness-to-buy, it is often utilized to describe a relationship between a person and a product (Huppertz, 1978). Willingness-to-purchase allows the individual to take into account all of the factors which are important to them in the process of valuation for the good or service (Naing, 2010). Willingness-to-purchase has been used to measure consumer patronage when studying the effects of perceived fairness in purchase transactions (Sarah Maxwell, 2002).

Consumers rank hotels according to their preferences and first consider the most attractive as the first choice for booking. It is assumed, as Schwartz (2000) did, that the consumer can translate the perceived differences in hotel attributes and thus make a monetary equivalence. In this study willingness-to-purchase is one of the measurements by which this study attempts to place a valuation on the reservation policy of hotels.

### **Word of Mouth**

The concept of word-of-mouth (WOM) is defined as informal communications between two or more persons with regards to the evaluations of goods or services (Anderson 1998; Dichter 1966; Westbrook 1987). Word-of-mouth is further defined as an informal method of voice one's satisfaction or dissatisfaction to friends or family as opposed to communicating directly to the firm or establishment providing the good or service. Positive word-of-mouth typically includes relating pleasant, vivid or novel experiences and positive recommendations. Negative word-of-mouth usually takes the form of complaints and product degradation concerning the good or service (E. Anderson, 1998).

### **Both Satisfied and Dissatisfied Customers Engage in Word of Mouth**

It has been shown that satisfied customers participate in positive word-of-mouth with regards to the goods or services they have received (de Matos & Rossi, 2008; Ladhari, 2007). Word of Mouth is widely used as a measure of customer satisfaction in marketing and consumer behavior research studies (E. Anderson, 1998). A strong correlation has been shown in studies regarding positive word of mouth and positive customer satisfaction (Dichter, 1966).

It has also been shown that dissatisfied customers also engage in negative word-of-mouth with regards to the goods or services they have received. Research has indicated that if a customer is dissatisfied with a product or service, they are more inclined to engage in negative word-of-mouth as opposed to giving positive word-of-mouth for a positive experience (Schlossberg, 1991; Westbrook, 1987).

### **Research Question 1 Hypotheses 1a, 1b and 1c**

This study was guided by the following nine research questions. Research questions one through four are concerned with the attitudes of consumers and their patronage of lodging establishments when they feel that the price of a hotel room is fair when compared to their internal reference price. According to Thaler's principles of mental accounting, consumers treat perceived losses and gains differently in customer transactions. Thaler's research shows that the pleasure of a \$1 gain is unequal and less than the pain incurred from a \$1 loss (R. Thaler, 1980, 1985). The concept of personal fairness is one of the foundational concepts that was used to measure the way in which customers consider patronage and leads us to research question #1:

Research Question 1: Does increasing quoted room rate, negatively affect consumer patronage in terms of willingness-to-purchase?

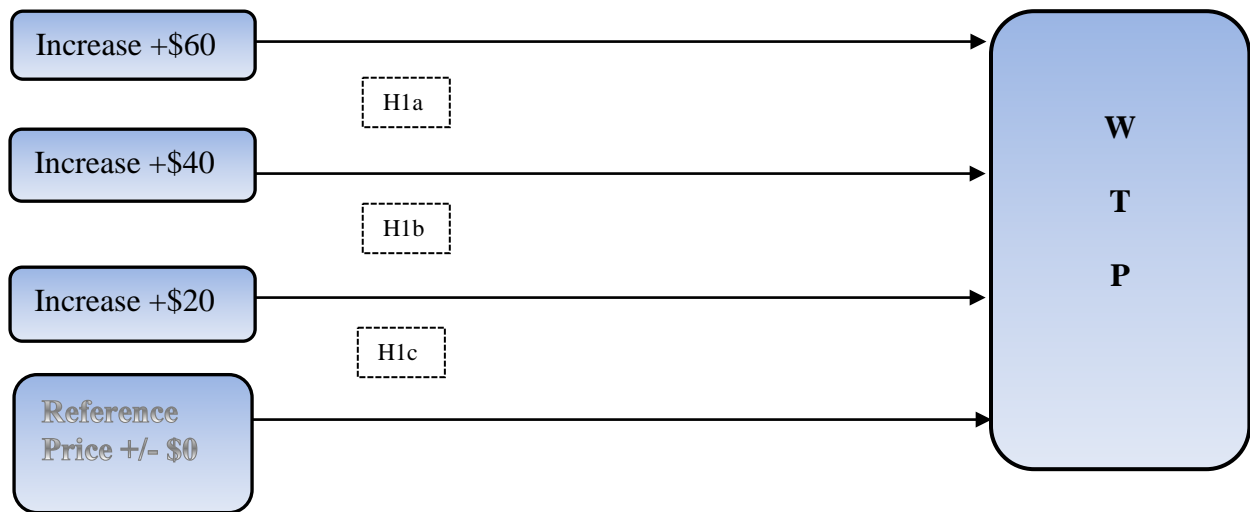
Consequently, the following hypotheses about the relationship of personal fairness and consumer patronage are proposed:

***H1a:*** *The increase of a quoted price of \$20.00 in room rate compared to an expected reference price has a negative effect on consumer patronage when measured in terms of willingness-to-purchase.*

***H1b:*** *The increase of a quoted price of \$40.00 in room rate compared to an expected reference price has a negative effect on consumer patronage when measured in terms of willingness-to-purchase.*

***H1c:*** *The increase of a quoted price of \$60.00 in room rate compared to the increase in an expected reference price has a negative effect on consumer patronage when measured in terms of willingness-to-purchase.*

**Figure 1: The Effect of Increasing Hotel Rates when Compared to a Reference Price on Consumer Patronage in Terms of Willingness-to-Purchase (WTP)**



## **Research Question 2 Hypotheses 2a, 2b and 2c**

Research Question 2: Does discounting quoted room rate, positively affect consumer patronage in terms of willingness-to-purchase?

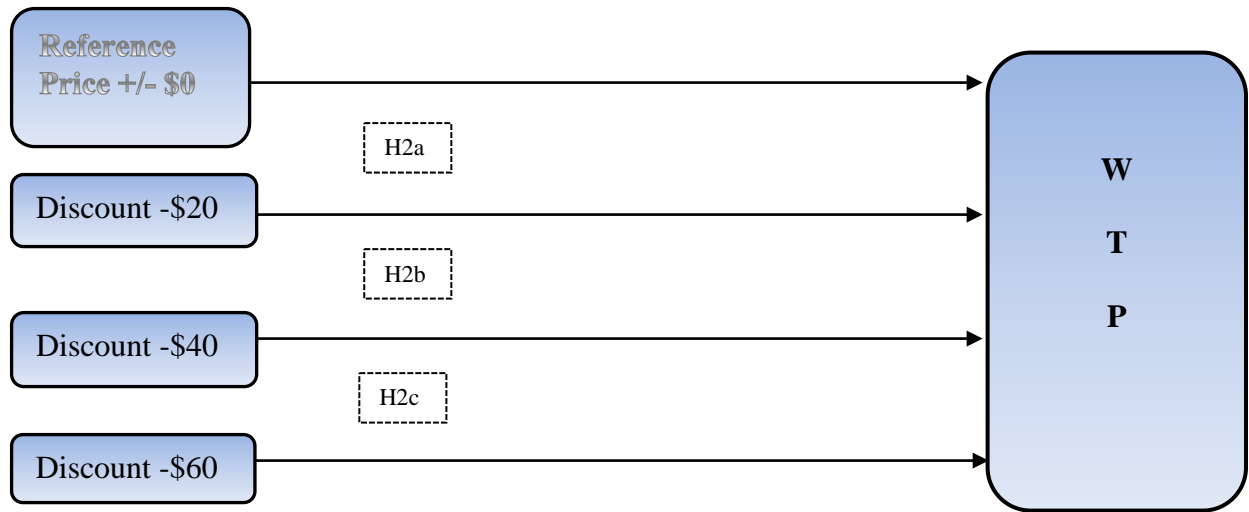
Consequently, the following hypotheses about the relationship of Personal Fairness and Patronage are proposed:

***H2a:*** *The discount of a quoted price of \$20.00 in room rate compared to an expected reference price will not have a positive effect on consumer patronage when measured in terms of willingness-to-purchase.*

***H2b:*** *The discount of a quoted price of \$40.00 in room rate compared to an expected reference price has a positive effect on consumer patronage when measured in terms of willingness-to-purchase.*

***H2c:*** *The discount of a quoted price of \$60.00 in room rate compared to an expected reference price has a positive effect on consumer patronage when measured in terms of willingness-to-purchase.*

**Figure 2: The Effect of Discounts of Hotel Rates when Compared to a Reference Price on Consumer Patronage in Terms of Willingness-to-Purchase**



### **Research Question 3 Hypotheses 3a, 3b and 3c**

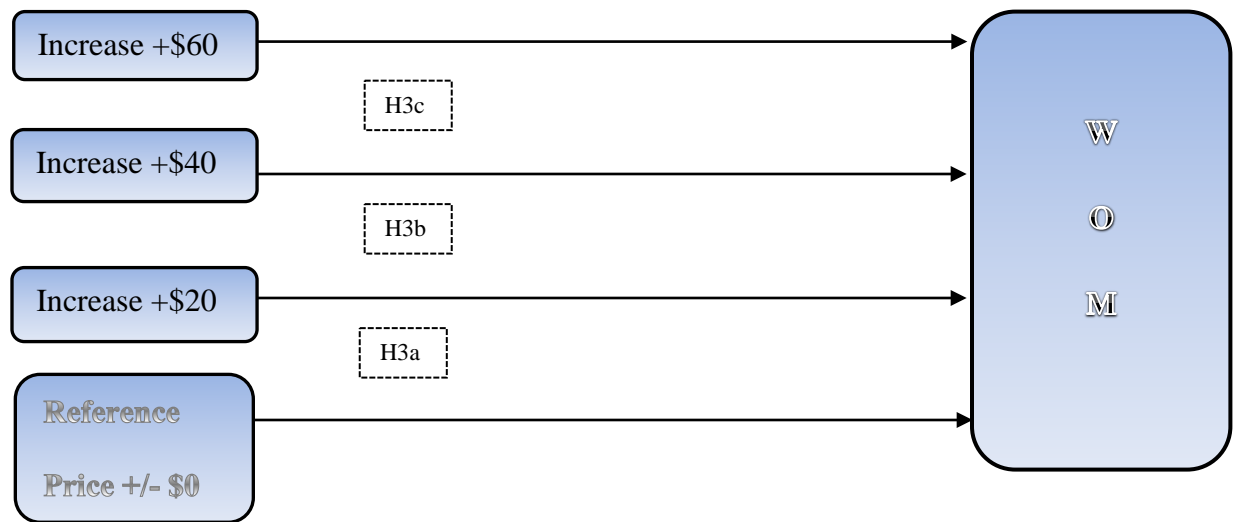
Research Question3: Does increasing quoted room rate, negatively affect consumer patronage in terms of word-of-mouth?

***H3a:*** *The increase of a quoted price of \$20.00 in room rate compared to an expected price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of word-of-mouth.*

***H3b:*** *The increase of a quoted price of \$40.00 in room rate compared to an expected price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of word-of-mouth.*

***H3c:*** *The increase of a quoted price of \$60.00 in room rate compared to an expected price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of word-of-mouth.*

**Figure 3: The Effect of Increasing Hotel Rates when Compared to a Reference Price on Consumer Patronage in Terms of Word-of-Mouth**





#### **Research Question 4 Hypotheses 4a, 4b and 4c**

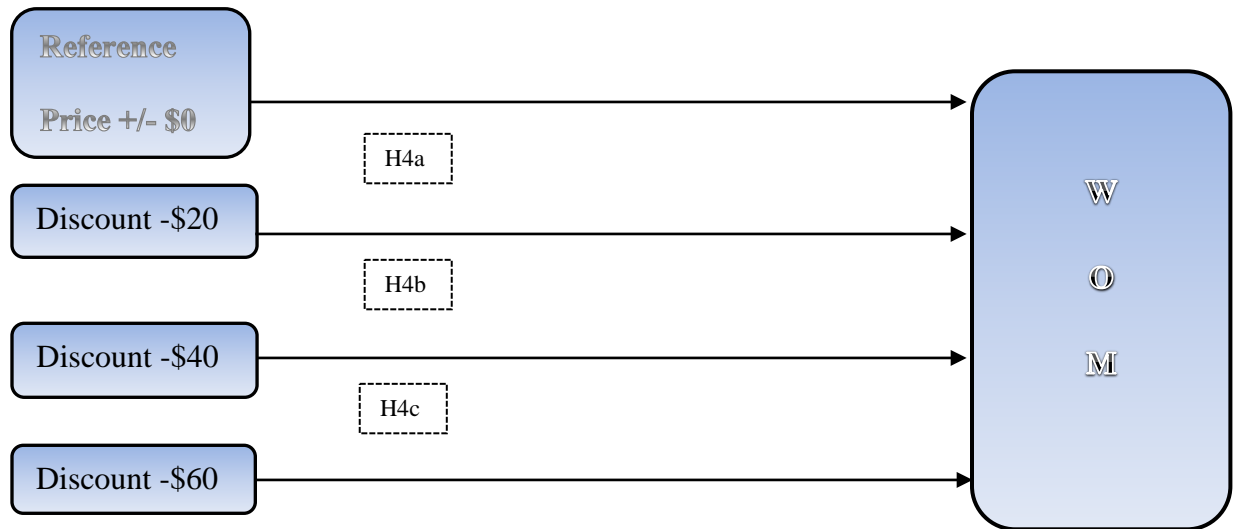
Research Question 4: Does discounting quoted room rate, positively affect consumer patronage in terms of word-of-mouth?

***H4a:*** *The discount of a quoted price of \$20.00 in room rate compared to an expected price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of word-of-mouth.*

***H4b:*** *The discount of a quoted price of \$40.00 in room rate compared to an expected price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of word-of-mouth.*

***H4c:*** *The discount of a quoted price of \$60.00 in room rate compared to an expected price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of word-of-mouth.*

**Figure 4: The Effect of Discounts of Hotel Rates when Compared to a Reference Price on Consumer Patronage in Terms of Word-of-Mouth**



## **Consumer Cancellation of Purchase Transaction**

### **Consumers Favor Liberal Return Policies**

Large retailers have in the past engaged in the practice of “no questions asked” full refund policies in an attempt to gain a competitive advantage in the marketplace and encourage consumers to make purchases (Che 1996; Davis 1995 et al.; Hart 1988; Schmidt 1985). These liberal return policies were enacted in an attempt to develop a genuine relationship with the customer and assure them that they will be treated with fairness. Every effort was made to avoid conflict with customers who were attempting to return merchandise in good faith. Berry (Berry, 1995) states “Corporate practices that rob customers of self-esteem or justice may be legal, but they destroy trust and consequently the potential for relationship building. Relationship marketers must be prepared to subject every policy and strategy to a fairness test. They must be willing to level the playing field. They must be willing to ask not only is it legal?” but also “Is it right?”

### **The Evolution of the Liberal Customer Return Policies**

The original intent for liberal return policies was to provide a quality guarantee for the product being purchased (Davis, 1998; Grossman 1981; Mann 1988; Padmanabhan 1993; Wood. 2001). A consumer was in essence guaranteed that the product was free from defect and a “no-questions asked” return policy was the warrantee provided for this guarantee. Over time the idea behind the return policies was adjusted so that mere dissatisfaction and not product defect could justify a customer’s full refund on a return (Xie & Gerstner, 2007). In effect return policies began to be used as method for the manufacturer or retailer to signal the quality of the product or service offered. In essence a product defect was not required for a return, but merely for

dissatisfaction with the product (Moorthy & Srinivasan, 1995; Shieh, 1996). This is evidenced in the liberalizing of the policy to the point where customers no longer were required to provide any proof of product defect or any explanation regarding the return.

The above liberal return policy has profoundly affected the transaction process by delaying the purchasing decision until after the transaction and after the customer has had the opportunity to experience the product. If a consumer can receive a full refund for simple dissatisfaction, they in fact do not have to commit to the purchase until the period of time permitted for a refund expires (Che, 1996). It should also be noted that customers can return products when a comparable substitution can be found at a lower price. This example parallels the situation in which guests cancel a confirmed hotel reservation after finding a comparable substitute hotel room at a lower price.

### **Customer Returns and Moral Hazard**

Liberal return policies introduce moral hazard in consumption. Moral hazard customers act in bad faith by purchasing a product, use it and return it, even if the product or service was satisfactory and free of defects (Longo, 1995; Neuborne, 1996). It is estimated that product returns cost manufacturers and retailers an estimated \$100 billion each year indicate a legitimate abuse (Anderson, Hansen & Simester, 2009). Liberal return policies have led to well documented abuses by the customers taking advantage of an enterprise's good will gesture to provide product warranties. These abuses have become so excessive recently retailers have made adjustments to return policies that are an attempt to curtail customer abuses. The well-known example of customers returning deluxe television sets after a major event viewed by many watchers or the return of a video recorder after a daughter's wedding lead some electronic stores to change their policies to non-cash exchanges (Duff, 1992; O'Brien, 1994).

### **Retailers React to Customer Abuse of the Liberal Return Policies**

In an attempt to reduce losses, retailers have been modifying liberal return policies (Longo, 1995). These modifications predominantly are instituted in the form of a customer penalty which is defined as "the imposition of a fee when the customer fails to complete the original purchase agreement"(E. Fram, 1997). These fees typically take the form of providing a partial refund and are labeled as a "restocking fee". Catalog merchants will institute a shipping and handling fee for product returns which amounts to a partial refund as the consumer does not receive the full amount of money they expended for the purchase (Hess, Chu & Gerstner, 1996).

### **Retailers Set Different Policies with Regards to Returns**

Most of these retailer firms make these restrictive changes to return policies with caution in an attempt not to displease customers who may take their business to competitors and reduce demand for their products (McCarthy, 2000). Even with this caution there have been steps made to alter return policies that both reduce customer abuse and still allow customers the ability to return products or services for legitimate reasons (E. H. Fram, 1997). This customization of return policies by differing firms has moved the retail industry from maintaining homogeneous policies among competitors to wide and varying rules (E. T. Anderson, et al., 2009). An example of this variety in restrictions can be found on the Cold Water Creek Women's apparel web-site which states "Premium Retail, Web, and Catalog items may be returned at any time. Returns of items purchased through our Outlet locations, the Web Outlet, or Clearance/Sale catalogs will be accepted within 30 days of the original purchase."(Cold Water Creek, 2010). This example shows that the retailer, Cold Water Creek has enacted different policy restrictions on returns not only different from competitors which typically place 30 or 60 day return restrictions, but also for different stores that in essence sell the same products. Sears department stores also

customizes its return policies and places more restrictions on categories of products within a single store. An example is the greater restrictions on returns of home electronics and mattresses compared to other product categories, which tend to have less restrictions (Merrick, 2005).

### **Customer Perception of Penalties for Returns**

Few studies have been conducted regarding consumer reaction to implementing penalties for returns/cancellations. Fram and McCarthy (1999) conducted a broad study of customers who have had to pay penalties in the past. The conclusion of the study indicated that there is a broad acceptance with regards to their perceived fairness towards the consumer. They identified that consumers were accepting of penalties if these were incurred as the result of the consumer's free choice or the result of the consumer's negligence. The cancellation/ return penalty was perceived as unfair in unavoidable circumstances, such as illness or the death of a relative. In these situations, consumers believe that the organization has an obligation to waive the penalty fee. The results of this study support the belief that consumers are willing to compensate the organization in certain circumstances and believe the concept of penalty fees are acceptable.

## **Forecasting in the Lodging Industry**

### **The Importance of Forecast Accuracy in Lodging Operations**

It is believed that accurate forecasting of room rate and occupancy percentages is a high priority for both owners and operators of lodging facilities around the world. Accurate forecasting of a lodging enterprise's future performance allows for managers in all areas of the lodging operation to make important tactical decisions with regards to staffing, budgets, expenditures and policy (Law 2004; Bobb 2008; Lim et al. 2009). The financial interests of a lodging enterprise ownership also depend upon accurate forecast to formulate short and long term business plans that depend heavily upon the expected revenues and cost associated with future performance of an operation (Law, 2004). Hotel corporate executives and general managers utilize revenue forecast to formulate an annual budget for the upcoming year. Future pricing decisions and policies are based upon the accuracy of these forecast (Steed & Gu, 2005).

### **Hotel Forecasting Presents a Challenge**

Lodging managers are expected by various stakeholders, such as owners and corporate headquarters to make and present accurate forecast of future revenues. This presents a challenge as the majority of lodging operations experience fluctuations in demand is affected by both day of the week and seasonal variables (Choi, 2003; Corgel, 2003) . The responsibility of providing accurate and revenue forecast to stakeholders is traditionally a shared responsibility amongst the senior managers of any lodging operation and in most hotel enterprises this is performed by the Executive Committee. Although providing accurate revenue forecast is typically a shared task, the General Manager as the Chief Operating Officer of the operation is ultimately responsible for accurate and actionable information (Hayes et al., 2006). A hotel's general manager is called

upon to not only oversee the day-to-day operational decisions, but also to work with owners and corporate management in the strategic management process (Brown & Dev, 1999). Strategic forecast is a crucial component of the strategic management process (Bracker, 1980).

### **The Use of Advance Purchase Discounts**

Because of perishability of inventory, hotels and airlines engage in the discounting of standard rates as a method of offset low demand or demand uncertainty and maximize profitability. Past airline pricing studies have shown that the majority of passengers receive some type of discount (McGill & Van Ryzin, 1999). A majority of hotel customers also receive some discount off of the hotel's established rack rates. This leads to the customer feeling as though they have received a special deal from the airline or hotel when the discounted rate is compared to the full fare or rack rate. (Kimes, 2002). These advanced purchase discount rates are provided in exchange for removing the ability of the consumer to cancel the reservation without some type of penalty. In essence the consumer makes the purchase at the time of the reservation and agrees that they will not be entitled to a full refund if they cancel the purchase. This in effect creates a no refund provision in the transaction.



## **Hotel Reservation Cancellation Policies**

### **Reservation Cancellations**

The majority of scholarly literature regarding hotel reservation cancellations directly focuses on their effects on revenue management models. With the exceptions of Chen, Schwartz & Vargis. (2011) and DeKay, Yates & Toh (2004) the literature is limited regarding consumer behavior and their attitude towards reservation cancellation policies in the lodging industry. The cancellation of a confirmed hotel reservation is similar in nature to a return of a product in that the customer commits to a purchase and consumption of a service and does not fulfill this commitment. It is assumed that with the limited amount of research for hotel cancellation policies, existing literature can be utilized to guide the understanding of consumer behavior. Charging a cancellation fee for a confirmed hotel reservation is similar to having a return fee for product

### **Option Based Reservations**

Currently the majority of hotels follow a liberal policy of allowing hotel guests to place an option on a hotel room at the time of the reservation. A hotel reservation is in fact a financial option written by the hotel and given to the guest (Quan, 2002). This particular policy puts the hotel at a distinct disadvantage. “Since guest have the option to cancel their reservations if they find comparable service at a lower price, this use of reservations results in issuers bearing the risk of unanticipated cancellations” (Quan, 2002). A recent trend developing has hotel companies following the lead of the airlines and developing stricter cancellation policies (Engle, 2009).

As different hotels establish their cancellation policies regarding room reservations, they establish the option under which consumers may purchase the room and the conditions of the transaction. If a hotel allows a guest to hold a confirmed reservation and then cancel this reservation without penalty on the day of arrival, this is referred to as a European Call Option (Appendix A).

But, in the US, the majority of hotel companies establish what is known as a Traditional Reservation as a matter of policy for a standard reservation. A Traditional Reservation allows the customer the option to hold the reservation and purchase the hotel room at a set time in the future for a set price (the room rate). The fixed time in the future for most hotel chains is two to three days prior to arrival. This is commonly known as the 48/72 hour guarantee in the hotel industry. As the arrival time falls within 48/72 hours, the Traditional Reservation is then converted into a costlier option prior to arrival, and the customer incurs some form of penalty for the cancellation.

The following statement was taken directly from the Embassy Suites website regarding the reservations policy for a “Best Available Rate”: “Cancellation Policy: If you wish to cancel, please do so 72 hours before arrival to avoid cancellation penalties” (Padmanabhan & Rao, 1993). These types of reservation policies are called Option-Based Reservation Policies.

### **Development of the Traditional Reservation Cancellation Policy**

#### **Traditional Reservation Cancellation Policy**

In an effort to appeal to a greater number of customers, policies regarding the making and the holding of hotel reservations were formulated and instituted by the major hotel chains. One such policy is the liberal open cancellation policies put into effect that appeal to travelers who

needed to make changes or enact cancellations to existing reservations. This liberal cancellation policy encourages consumers to make their reservations in advance. Because hotels have a limited inventory and the product is perishable, advanced bookings are critical as a leading predictor of a hotels forecasted performance on any given night. Advanced bookings are critical in helping to match demand with capacity which is one of the goals of hotel revenue management (Morrison, 2002).

### **The Development of Liberal Cancellation Policies in the Lodging Industry**

In an effort to appeal to a greater number of customers, policies regarding the making and the holding of hotel reservations were formulated and instituted by the major hotel chains. One such policy is the liberal cancellation policies put into effect that appeal to travelers who needed to make changes or enact cancellations to existing reservations (DeKay, Yates & Toh, 2004). This liberal cancellation policy encourages travelers to make their reservations in advance. Because hotels have a limited inventory and the product is perishable, advanced bookings are critical as a leading predictor of a hotels forecasted performance on any given night. Advanced reservations are an important element in helping to match demand with capacity which is one of the goals of hotel revenue management (Morrison, 2002).

The previous stated reason for doing this is that an option to purchase gives the consumer an unfair advantage over the hotel in the buyer/seller relationship. This alone is a strong reason to migrate away from this liberal policy. This may not be the strongest reason to change to a purchase at the time of the reservation policy. The strongest incentives for hotels to make a change are the accuracy of information regarding future bookings that will allow them to increase the accuracy of their rooms revenue forecast. Schwartz and Cohen discuss in detail the importance in the accuracy of proper forecasting. Having a guest hold options on reservations

and then release them at a later date greatly reduces a hotels ability to accurately make accurate forecast (Schwartz & Cohen, 2004).

### **The Disadvantages for Hotels that Utilize Traditional Reservation Cancellation Policies**

The economic disadvantage for a hotel that engages in option based reservations policies is twofold. If a hotel allows the guest to place the option to purchase a hotel room at a lower rate than will eventually be realized in the market, the guest will exercise the option and therefore get the room below the average market room rate. The hotel will have to honor this low rate, even though they could have sold the room at a higher rate, if they were allowed to break the option agreement. Conversely, if the guest places an option reservation on a hotel room at a price that eventually is higher than the average price of the market, guest are allowed the ability to cancel the reservation option without penalty and book elsewhere at a lower rate. The hotel suffers further in that they may have been turning away other customers in anticipation of having the first guest exercise that option. If this guest cancels this option close to the check-in date, the hotel may not have the ability to resell that room.

### **Restricting Reservation Cancellation Policies**

The lodging industry in general, has not yet adapted the same level of restrictions on their discounted rates as the airline companies. In 1990, the Marriott Hotels pioneered the concept of providing discounted rates in exchange for removing the open cancellation policy by placing tighter cancellation policy restrictions on selected discount rates. In December 1990, 149 Marriott hotels offered holiday discount rate of \$49 in exchange for a non-refundable conditions and a 14 day advance purchase (Hanks, et al., 2002). Other major hotel companies have followed the lead of Marriott Hotels and have instituted discounted rates in exchange for customers forgoing the free-option cancellation policy and agreeing to purchase several days in advance. It

is assumed that the lodging industry favors promoting such programs and has continued to expand their scope. This is evident in the fact that all of the top ten worldwide hotel groups have some form of advanced purchase, no refund reservation option in place.

### **Current Lodging Practices Regarding Reservation Cancellation Policies**

Currently few hotels and resorts utilize a non-option reservation policy and these lodging enterprises tend to be independent properties without any chain affiliation. The Beaver Creek Luxury Resort utilizes this policy for their summer reservations and this policy is clearly stated on their web-site which states “One night room and tax is charged and non-refundable at the time of booking.” (Beaver Creekde Matos & Rossi, 2008)

Other independent hotels and resorts allow for refunds upon cancellation, but withhold a certain percentage or flat amount as a penalty. These penalty fees are typically given an alternate label such as processing or booking fees. An example of this is the posted cancellation policy for the Grand Hotel on Mackinac Island, in Michigan which states: “A deposit for the first two nights is required when you make your reservation. Your reservation deposit will be refunded, less a \$40.00 processing fee, with notice of cancellation at least 10 days prior to your scheduled arrival. Reservations cancelled less than 10 days prior will forfeit their room deposits.” (Grand Hotel Mackinac Island, 2010).

Although there are some exceptions such as the Beaver Creek Luxury Resort, the lodging industry in general, has not yet adapted this strategy of removing the open hotel reservation policy on their standard room rates. The overwhelming majority of hotel chains (i.e. Marriott, Hilton, Starwood, Holiday Inn) still allow the guest to place an option on their confirmed reservation, which in turn allows the guest to cancel this option/reservation without penalty.

## **The Role of Social Fairness**

In certain literature, Social Fairness is also referred to as Social Justice. Although the terms are synonymous, Social Fairness tends to be more prevalent in consumer behavior studies whereas Social Justice appears mostly in legal research.

Social fairness is based upon the prescriptive norms of a societal group (Carr, 2000). Personal fairness affects someone personally and singularly. The prescriptive norms of Social Fairness describe as what should or should not be done. Violation of Social Fairness norms can cause emotions that are as strong as fury (S Maxwell, 2008). Research indicates that people divide Social Fairness into the two sub-categories of Distributive Fairness and Procedural Fairness. The intensity of the emotion is dependent upon which of two fairness types has been violated. A third concept of Retributive Fairness (or Retributive Justice) is a component of Social Fairness, but this is rarely applied to consumer patronage and is more prevalent in legal literature.

### **Distributive Fairness**

The Distributive Fairness is based upon *norms of equity*. This can be interpreted as everyone should be treated equally or the same. A violation occurs when the purchasing process is not applied equally and fairly to all involved in an economic transaction.

Distributive fairness is based in principle on the fairness of outcomes. This concept has further been defined as the universal social norm of reciprocity and stated as a pattern of mutually contingent exchange of gratifications. Reciprocity as a moral norm is believed to be one of the universal "principal components" of moral codes for all people and cultures (Gouldner, 1960).

## **Procedural Fairness**

Procedural Fairness is concerned with the fairness and transparency of the processes of the transaction. Procedural Fairness takes into account impartial, transparent rules and their ability to ensure that each participant in an activity has the ability for an equal opportunity to obtain a satisfactory outcome. Procedural Fairness goes beyond the administration of the neutrality of a random process. Procedural Fairness is also concerned with the appearance of neutrality calling for an open transparency of the processes for all who are involved (Krawczyk, 2009). It is believed that fair procedures lead to equitable outcomes for all parties involved in the transaction (S Maxwell, 2008). Economists state that the terms Procedural Fairness and Procedural Justice are synonymous. Procedural Justice in economic terms is defined as the share of one's expected outcome in the sum of all expected outcomes (Krawczyk, 2009). Many times procedural fairness is violated when conditions of the transaction are not transparent to the consumer. (Schneider & Bowen, 1998).

With regards to the hotel reservations process, the two parties represented in the transaction are the customer/guest and the firm/hotel. An example of a procedural fairness violation may include the hotel not disclosing additional fees that will be added onto the consumers account upon checkout and that were not disclosed at the time of securing the reservation. Most consumers assume that all cost for their hotel stay should be disclosed up front at the time of reservation and any "surprise" costs are a violation of procedural fairness. The consumer is dissatisfied because they may believe that the hotel is attempting to increase their profitability margin at their expense. It can be commonly stated that "they are trying to rip me off" and anger ensues at this violation of procedural fairness.

### **Personal Fairness and Social Fairness Interaction**

The above example of the bottle of water to be purchased at the theme park does not meet the personal fairness standard. In failing the personal fairness standard, the customer may elect not to make the purchase or make a purchase decision based on social fairness. The first of the social fairness considerations is distributive fairness. In distributive fairness, customer may ask themselves is the transaction fair for both the buyer and seller. If the customer does not consider it to be an equitable exchange, then many times they will forego the purchase. If in the transaction the seller of a bottle of water can justify the higher than anticipated price (i.e. scarcity, higher fixed cost) and convey this information to the buyer, they may be persuaded that the higher cost to the seller is justification for a higher sales price. If the answer is yes, the customer will then consider the procedural fairness of the transaction. If there are any undisclosed add on fees, such as a recycling fee or green fee added to the purchase price, this could be interpreted as a violation of procedural fairness. This would be considered “not fair” by most consumers and produce a justification to bypass the purchase. If the purchase price does not involve any surprise additions, this can convince the buyer that procedural fairness has not been violated and the buyer will give themselves the permission to make the purchase at the higher than anticipated sales price.



**Table 2: Personal and Social Fairness**

<b>Personal Fairness</b>	Based on personal preferences (Reference Price)
	Is violated when price exceeds what is expected
<b>Social Fairness</b>	Based on societal norms
Made up of two sub-categories:	
<b>Distributive Fairness</b>	Is violated when everyone is not treated equally
<b>Procedural Fairness</b>	Is violated when the process is not transparent and produces unexpected outcomes/conditions

### **Customers Reaction to Perceived Unfairness**

Anger is the typical reaction to any violations of Social Fairness and this often leads to punishment towards the firm by the consumer. This punishment may be passive or active.

Passive reaction may include refusing to purchase or do business with the firm. Active punishment is more drastic and could include complaining to the company, engaging in negative word-of-mouth with friends or family and even legal action against the firm (S Maxwell, 2008).

A psychology researcher, Norman Finkel stated that people react emotionally to situations that they consider to be unfair, while they show no emotional response to situations they consider to be fair (Finkel, 2001). These emotional responses are typically directed at the person or organization perceived to be facilitating or creating the unfair situation. Customers react unfavorably towards companies that they feel have violated a perceived fairness principle. These reactions reduce a customer's willingness to interact or continue a business relationship with the company that they have perceived as being unfair (S Maxwell, 2008).

### **Fairness Leads to Acceptance**

Much sociological research has been conducted with regards to the perceptions of fairness and acceptance. Early research has focused on government, laws and how they affect citizen's perceptions of fairness of court rulings. Citizens care deeply about how decisions regarding governmental laws and policies are made with regards to the decisions affecting them directly (Houlden, Latour, Walker & Thibault, 1978; Lind & Tyler, 1988; Thibaut, 1975) outline a concept labeled the fair process effect, in which are included the factors of: lack of bias, thoroughness, clarity, the ability to tell one's story and dignified respectful treatment (Lind & Tyler, 1988). It has been shown that if all of these factors are presents, than people will typically considers a decision to be fair and is much more likely to accept the decision even if it does not favor them personally.

These concepts of fairness and acceptance are not held exclusively to laws and government policies, but can be extended to commerce and customer/employee relationships with business enterprises. Recent studies have connected a person's acceptance of changes in wage policies to the perceived fairness of the change. It was shown that procedural and interpersonal fairness in the existing pay system moderated the relationship between fairness of current outcomes and merit pay (Van Dijke, De Cremer, Bos & Schefferlie, 2009).

### **Fairness in Lodging Revenue Management Practices**

It is believed that consumers prefer companies that engage in what they consider to be fair pricing policies (Kahneman et al. 1986; R. Thaler, 1985). As the lodging industry is considered to be a service industry, the pricing component for hotel rooms is particularly important as typically customers must first make the purchase commitment prior to experiencing the product. The perception of fairness is crucial under these unique conditions as with other

service providers (Seiders & Berry, 1998). It is important for any lodging establishment to foster a perceived pricing fairness reputation in order to create both customer satisfaction and profitability (Kahneman et al., 1986). Fair behavior is instrumental to the maximization of long-run profits (R. Thaler, 1985). This fair behavior requirement also holds true for the hotel industry in the practice of revenue management (Kimes, 2002).

### **Research Question 5 Hypotheses 5a, 5b and 5c**

Research Question 5: Do different hotel cancellation policies have a significant moderating effect on consumer patronage in terms of willingness-to-purchase?

***H5a:** In a condition without a violation of procedural fairness or distributive fairness, consumer patronage in terms of willingness-to-purchase is highest when an open cancellation policy is implemented when compared with 48 hour cancelation policy.*

***H5b:** In a condition without a violation of procedural fairness or distributive fairness, consumer patronage in terms of willingness-to-purchase is highest when an open cancellation policy is implemented when compared with no refund cancelation policy.*

***H5c:** In a condition without a violation of procedural fairness or distributive fairness, consumer patronage in terms of willingness-to-purchase is highest when a 48 hour cancellation policy is implemented when compared with no refund cancelation policy.*

### **Research Question 6 Hypotheses 6a, 6b and 6c**

Research Question 6: Do different hotel cancellation policies have a significant moderating effect on consumer patronage in terms of word-of-mouth?

***H6a:** In a condition without a violation of procedural fairness or distributive fairness, consumer patronage in terms of word-of-mouth is highest when an open cancellation policy is implemented when compared with a 48 hour cancelation policy.*

**H6b:** *In a condition without a violation of procedural fairness or distributive fairness, consumer patronage in terms of word-of-mouth is highest when an open cancellation policy is implemented when compared with a no refund cancelation policy.*

**H6c:** *In a condition without a violation of procedural fairness or distributive fairness, consumer patronage in terms of word-of-mouth is highest when a 48 hour cancellation policy is implemented when compared with no refund cancelation.*

### **Research Question 7 Hypotheses 7a, 7b and 7c**

Research Question 7: Does the violation of procedural fairness have a significant moderating effect on consumer patronage in terms of willingness-to-purchase?

**H7a:** *Violation of procedural fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and an open cancellation policy.*

**H7b:** *Violation of procedural fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and a 48 hour cancellation policy.*

**H7c:** *Violation of procedural fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and a no refund penalty cancellation policy.*

### **Research Question 8 Hypotheses 8a, 8b and 8c**

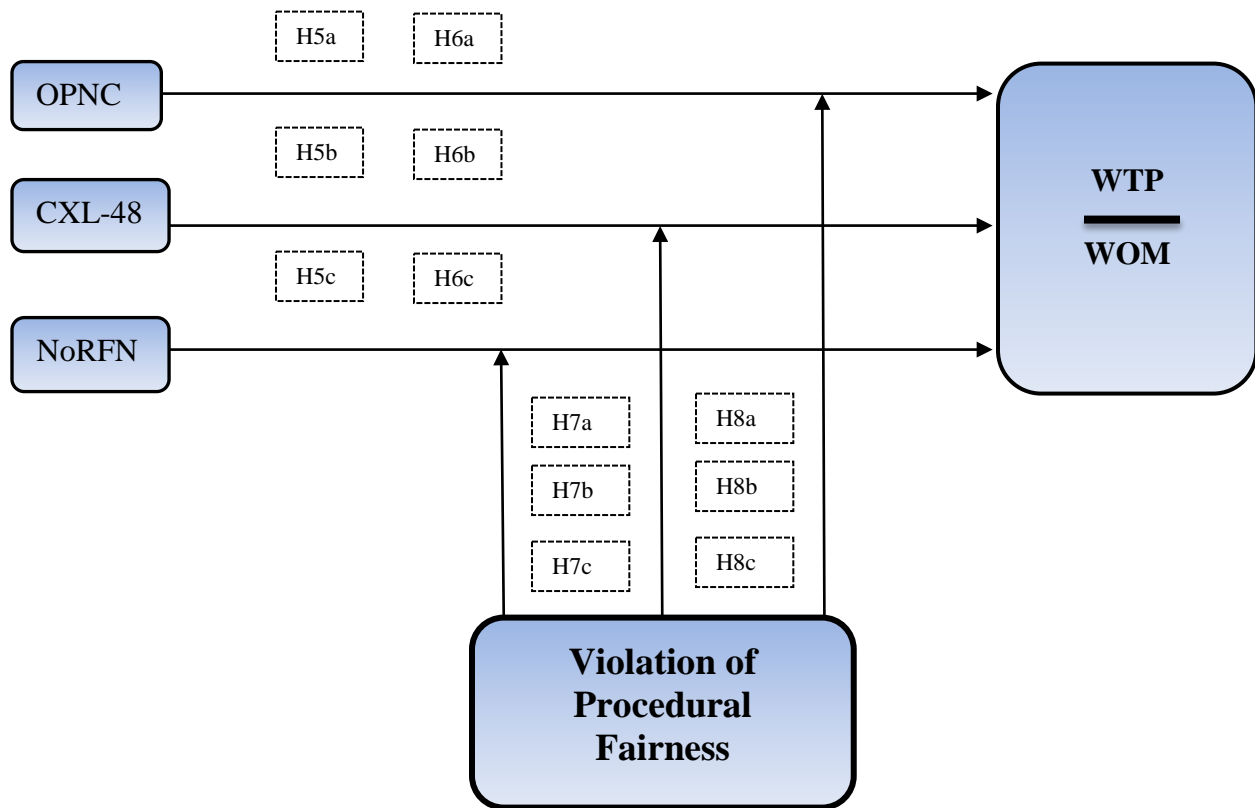
Research Question 8: Does the violation of procedural fairness have a significant moderating effect on consumer patronage in terms of word-of-mouth?

**H8a:** *Violation of procedural fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and an open cancellation policy.*

***H8b:*** Violation of procedural fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and a 48 hour cancellation policy.

***H8c:*** Violation of procedural fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and a no refund penalty cancellation policy.

**Figure 5: The Relationship between Perceived Procedural Fairness, Hotel Reservation Cancellation Policies and Consumer Patronage**



**CANCELLATION POLICIES**

OPNC = Open Cancellation Policy  
 CXL-48 = 48-Hour Cancellation Policy  
 NoRFN = No Refund Policy

**CONSUMER PATRONAGE**

WTP = Willingness to Purchase  
 WOM = Word of Mouth

### **Research Question 9 Hypotheses 9a, 9b and 9c**

Research Question 9: Does the violation of distributive fairness have a significant moderating effect on consumer patronage in terms of willingness-to-purchase?

**H9a:** *Violation of distributive fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and an open cancellation policy.*

**H9b:** *Violation of distributive fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and a 48 hour cancellation policy.*

**H9c:** *Violation of distributive fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and a no refund penalty cancellation policy.*

### **Research Question 10 Hypotheses 10a, 10b and 10c**

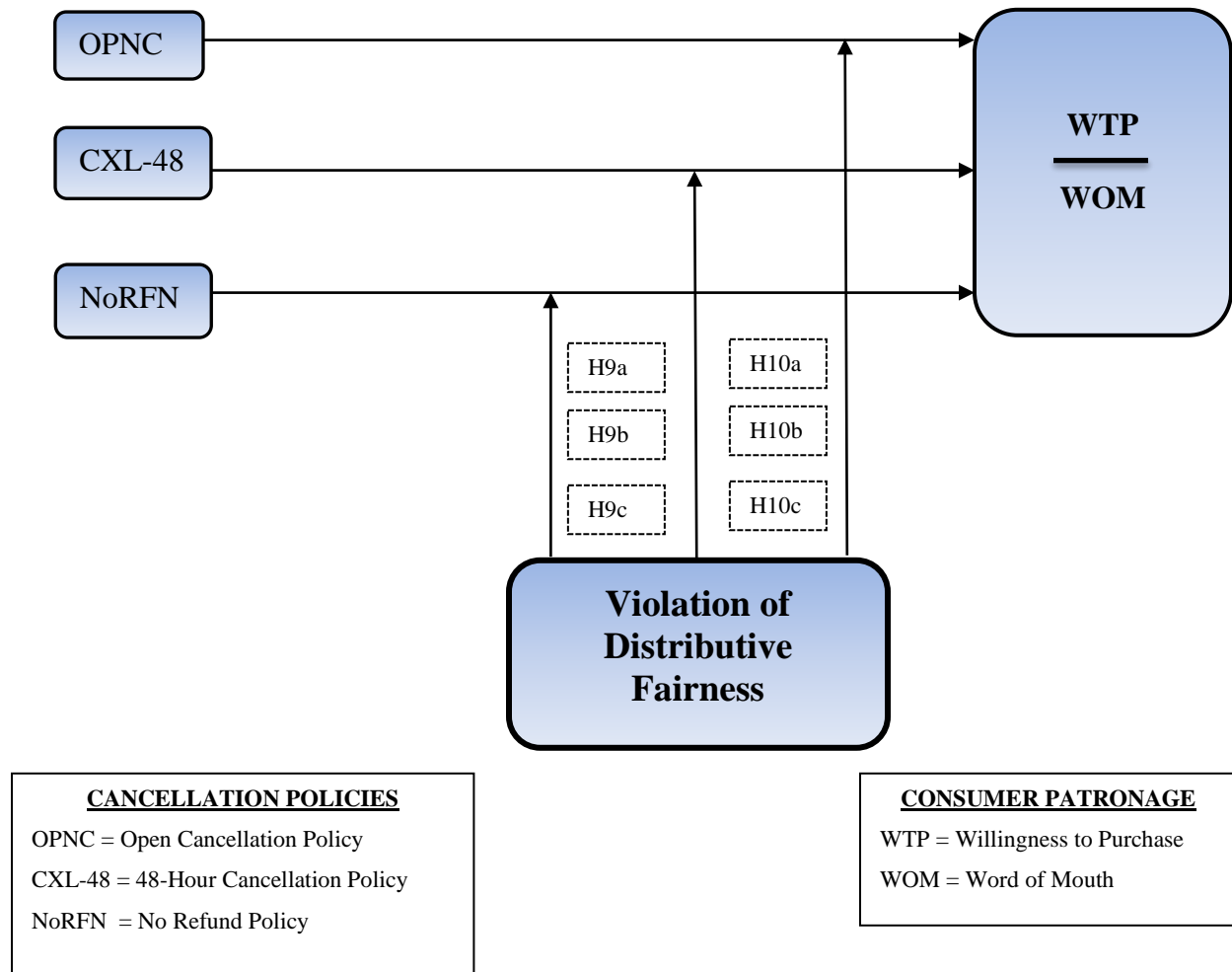
Research Question 10: Does the violation of distributive fairness have a significant moderating effect on consumer patronage in terms of word-of-mouth?

**H10a:** *Violation of distributive fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and an open cancellation policy.*

**H10b:** *Violation of distributive fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and a 48 hour cancellation policy.*

**H10c:** *Violation of distributive fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and a no refund penalty cancellation policy.*

**Figure 6: The Relationship between Perceived Distributive Fairness, Hotel Reservation Cancellation Policies and Consumer Patronage**





## **Summary and Conclusion**

This chapter explored and defined the concept of revenue management within the industry and how the goals of revenue management justify the study and attempts to modify existing hotel cancellation policies. Furthermore the concepts of perceived fairness, willingness to pay and word-of-mouth were identified as key components of the studies model. In the next chapter, the study will attempt to construct a working model that measures willingness to purchase and word-of-mouth to study the perceived fairness of existing hotel cancellation policies.

## **CHAPTER THREE: METHODOLOGY**

### **Introduction**

This chapter discusses the methods to be utilized to address the research questions and hypotheses discussed in chapter one and two. In addition, the methodology chosen to examine the research questions will be addressed. The conceptual framework will be discussed and used to incorporate the findings in the literature review to justify the study and the validity of the results. A detailed copy of the survey instrument is also provided in the Appendix section. Specifics of distribution and collection of the data required are also discussed in this chapter. This experimental design study will utilize a quantitative methodology to analyze the responses collected from the survey and this methodology will be presented in this chapter. This chapter includes the details of population, sample, collection methods, and statistical analysis.

### **Conceptual Framework**

Consumers follow a process in the decision to purchase a good or service. As discussed in the literature review section of this study, sometimes two opposing theories are used to explain the same phenomenon. Utility Theory states that consumers frame their purchase decisions based upon what the expected utility of that good or service is to be. Utility Theory is an extension of the Normative Theory which states that rational consumers will act rationally in the purchase decision. This rational behavior considers the currency utilized in a transaction to be fungible. The concept of fungibility would have consumers treat a \$10 loss to the same the magnitude of a

\$10 gain in the opposite direction. This implies a linear relationship between gains and losses of the same amount.

Descriptive Theory presents how consumers actually choose a course of action. This course of action is not always the optimal option available and many times is different from the decisions that would be arrived at with the Normative Theory. The Prospect Theory, closely related to the Descriptive Theory, replaces the concept of utility with one of value. Value is defined in terms of gains and losses by deviations from an original reference point. Kahneman and Tversky (1979) utilized Prospect Theory to study consumer behavior and found that in certain situations consumers perceive the value function for losses differently than the value function for gains. They further state that the value function for losses is steeper than that for gains. This finding by Kahneman and Tversky suggest a non-linear relationship and is the basis for the conceptual framework for this study. By constructing various-experimental scenarios involving hotel consumers in the evaluation of different treatments, the current study investigates the role of the concept of fairness in hotel reservation cancellation policies.

### **Experimental Design**

An experimental design method was utilized in this study as it is the best way to test causality in consumer decision making. Experimental design is used to isolate the dependent variable from the effects of external factors. Using this design, the study can clearly recognize the causal effect of manipulated variables on the dependent variable. One criticism of experimental design is that external validity is low compared to other methods and this limitation will be discussed later in this chapter.

### **Pricing Increase/Discount Component Design**

The first part of this study presented participants with scenarios that involve gains and losses in terms of hotel room rates. It is hypothesized that based upon Kahneman and Tversky's findings under Prospect Theory, participants will treat perceived losses in the form of price increases as having a greater affect than equal gains in the form of discounts. This affect was measured with the dependent variables of willingness-to-purchase and word-of-mouth in an effort to quantify consumer patronage.

The pricing scenario questions are designed to allow the participant to determine their own reference price. This was designed in an attempt to prevent price bias amongst the different participants. If a reference price was provided, it is assumed that participants may either infer conditions as to the quality of the hotel in question. It is believed that any inferences as to the quality of the hotel would alter some of the responses. The survey instrument is presented to the participants with the following scenario and they were asked to provide a response in the form of a Likert scale for both willingness-to-purchase and word-of-mouth. Here is an example of a scenario.

Someone is booking a hotel room. In the past they have paid what they consider to be a fair price for the hotel room. They are attempting to book a room at the same hotel under the same circumstances, and the room rate is the same as they paid for their last visit. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely    1        2        3        4        5        6        7    Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely    1        2        3        4        5        6        7    Very Likely**

The survey follows the above scenario with six additional questions, where three increases the rate at \$20 increments and three more questions involve discounting of the rate at \$20 increments. This price point was selected by performing a pilot study which is discussed later in this chapter. The \$20 increments were select to avoid having the participants perform difficult mental calculations. This also provides participants with round numbers that are immune to effects of odd number pricing strategies. In an effort to produce the maximum statistical power to the study, the same seven questions appeared on all four different surveys.

### **Procedural Fairness, Distributive Fairness and Cancellation Policy Design**

The Theory of Mental Accounting suggests that consumers place value on many attributes that are considered to be non-fungible. This theory is the conceptual framework that supports this current study as it attempts to observe how consumers perceive hotel cancellation policies. The second part of this study presented scenarios that determined a ranking order of three separate hotel cancellation policies while placing a quantitative value on each. It is hypothesized that consumers view the more liberal policy as a significant positive factor that affects consumer patronage, where the stricter policy will have a negative effect. The dependent variables observed are willingness-to-purchase and word-of-mouth, while the manipulations are the three hotel cancellation policies. Once the rank order was determined, the violation of distributive fairness and procedural fairness were introduced as a moderating factor, and the effects were observed when compared against the non-violation of distributive and procedural fairness.

The three cancellation policies are presented to respondents in both conditions of violation and non-violation of procedural and distributive fairness. This leads to a 3x2x2 design and the scenarios were mixed and divided by amongst four different survey instruments. [3 cancelation policies x 2 types of fairness x 2 measures of patronage]. The dividing of the different scenarios was designed to prevent a leading question/pattern effect and improve the validity of the instrument. The scenarios were divided to ensure that the participant received no more than two different cancellation policies and no more than two violations or non-violations.

### **Data Collection Procedures**

A standardized, interview questionnaire was developed and pre-tested in a pilot study to help ensure external validity. After the successful pre-testing and adjustments, the questionnaire was administered as an intercept survey at hotels located near a regional international airport. Four separate surveys were constructed and distributed in an attempt to measure how the different variables of personal fairness, distributive fairness and procedural fairness affect a customer's patronage when measured in terms of willingness-to-purchase and word-of-mouth. Each survey instrument utilized a scenario-based experiment and consist of 14 questions including 6 questions related to demographics.

This intercept at three different hotels near the Orlando International Airport were chosen as the points of data collection. International and domestic travelers visiting Orlando are expected to be the users of the lodging products and provide the best access to the population to be represented. The target population to be studied is adult hotel guests that are assumed to be staying in hotels. For the purposes of this study, a hotel customer was defined as an adult who

has utilized a lodging property at least one night in the year 2010 regardless of the type of lodging accommodation, rate paid or motivation for travel. Respondents were selected at random and no attempt was made to select respondents based on demographics other than adult travelers. Travelers that did not plan to use or did not use lodging facilities were excluded from the current study.

Upon receiving a signed consent form approved by the Internal Review Board (IRB) of the University of Central Florida to participate in the study, each respondent was provided with one of the four self-administered questionnaires. Demographic data was collected in addition to the specific scenario based questions involving perceived fairness. With the exception of the demographic data all measures regarding perceived fairness utilized a 7-point Likert scale.

### **Instrument/Measurement**

A standardized, self-administered questionnaire has been developed based on the literature review. There are a total of four survey instruments that are separated based on four separate scenarios that included Personal Fairness violations/non-violations and Distributive Fairness violations and Procedural Fairness violations. The measurement of the perceived fairness of Personal, Procedural and Procedural violations utilized a 7-point Likert scale with “1” representing strongly disagree and “7” representing strongly agree. Demographic information (i.e. age, income, marital status) was also be collected with the survey instrument.

### **Pilot Study #1 to Determine Price Points for the Primary Survey Instrument**

Initially a pilot study was conducted with a convenience sample of college students and a panel of industry experts to determine the range of hotel prices that would constitute a personal fairness violation. This study was conducted to help determine at what price point would an

increase over a previously determined reference price for a hotel room would create a violation of personal fairness and motivate a consumer to search for alternative lodging accommodations.

Survey participants were asked the single question:

*You are booking a hotel room. In the past you have paid \$100.00 per night and considered this price to be fair. You are attempting to book a stay at the same hotel under the same circumstances, and the rate is being raised on you.*

*What rate will you consider to be too high and have you begin to look at alternative hotels?*

A total of 260 surveys were distributed to students in college hospitality management classes and 190 were returned completed, providing a 73% response rate. The classes selected for pilot testing included *Introduction to Hospitality Management* (2 sections), *Guest Services Management* and *Theme Park Management*. The majority of students in the *Introduction to Hospitality Management* classes were freshman and sophomores, while *Guest Services Management* and *Theme Park Management* classes comprised of juniors and sophomores. Eight responses were determined to be unusable, providing 182 valid responses. The range of responses varied from \$101 to \$200, with a mean of \$137.59 and standard deviation of \$23.99. This indicates that the average subject believes that a \$137.57 hotel rate is a violation of their personal fairness when compared to a base reference price of \$100.00 for the same hotel room.

With the information provided from this pilot study, it was determined that by rounding up to \$140 as the price point, the majority of hotel customers would view a 40% increase in price over a referenced price of \$100 to be a violation of their Personal Fairness and becomes the catalyst to begin the search for alternative lodging accommodations.



### **Limitations of the Pilot Study to Determine Price Points for Survey Instrument**

Although this limited pilot study provided pertinent information that were incorporated into the researcher's principle survey instrument, there were some limitations that should be identified in the interest of validating the results. One was the simplification of the scenario presented in the questionnaire. The survey only mentions that the traveler has stayed in the hotel before and they considered to reference price of their stay to be a fair price. No mention of the type of lodging accommodation, length of stay or location is provided and the respondent is left to fill in the blanks with their imaginations. Although this is presented as a limitation, this lack of specific information is self-correcting once the participant is given the reference price of \$100. It is believed that the respondent populated these variables based upon their past experiences and imagined a hotel experience that was worth \$100 and proceeds accordingly.

The survey was also conducted amongst a convenience sample of college students in hospitality management classes. This convenience sample is not a fair representation of the population that was targeted in the primary research survey. None the less, college students are travelers who frequent lodging establishment. In addition, four experienced managers from the Central Florida hotel industry were asked to review the instrument and provide their feedback. This was performed to gain an industry perspective of the instrument and provide additional credibility.

A rounding up of \$140.00 from the average of \$137.59 is an attempt to present a readily identifiable number and not provide any distractions amongst the respondents who may misinterpret a non-rounded number. The number was rounded up as opposed to rounding down to ensure to increase the likelihood that the respondent instigated the desired effect of considering the price increase as a violation of their own personal fairness.

## **Reliability**

A comprehensive analysis of the collected data required several statistical methods to fully determine the relationship between the identified variables. The first step was to code the data from the completed survey instruments and load them into SPSS. This procedure is necessary to determine the reliability of the scale. The reliability of the a scale indicates how free it is from random error (Pallant, 2005). This is typically assessed though the measure of internal consistency, which is the degree to which the scale is measuring the same underlying attributes.

## **Validity**

Validity refers to the accuracy in which a scale measures what it is supposed to measure (Pallant, 2005). “The validity of a study means the extent to which the interpretation flows from the study itself and the extent to which the results may be generalized to other situations with other people”(Shavelson, 1995 p.19). The concept of validity is built upon the two subcategories, internal validity and external validity.

### **Internal Validity**

Internal validity is the extent to which the outcomes of the study are influenced from variable selection, variable manipulation and measurement. It is the degree that the results of the study can correctly be interpreted. Internal validity is further divided into the three categories of content validity, criterion validity and construct validity (Pallant, 2005).

Content validity is to what degree the study’s sample adequately represents the intended domain of the concept. To achieve this, the concept being studied must be clearly defined.

Content validity asks is the instrument a clear and unambiguously measure of the concept identified in the study. Content validity is best achieved by presenting the construct of the study and instrument to experts in the particular field being studied and seeking their approval. This study utilized experts from the field and faculty from a nationally recognized hospitality management program to confirm the content validity.

Criterion validity measures the validity of the results of the study against accepted standards and criterion achieved in previous valid studies. The criterion validity of a test can be measure by calibration against a known standard or against itself. The current proposed study utilized concepts and measurements developed and accepted in previous studies. These accepted concepts included willingness-to-purchase and word-of-mouth.

Construct validity is the measure of the relationships between the variables identified within the study. Construct validity determines the correlation between variables and their strength. It is the degree that one can infer and predict the value of one variable based upon another related variable of set of variables. ANOVA, Tukey's Post Hoc test and MANOVA are established statistical tools that were utilized for this study and used to help determine the construct validity.

### **External Validity**

External validity is the degree to which the findings of the study can be generalized to the population being studied. External validity is concerned with how a study's conclusions would hold for other people, in other places and at other times. To bolster the external validity of this study, sampling took place at three different hotels where it can be assumed that respondents included in the survey represented a wide cross section of the general travelling population. The

three hotels were purposely selected to be different levels of service in an attempt to collect a diverse sample of the travelling public.

### **Pilot Study #2: Reliability and Validity of the Primary Survey Instrument**

A pilot study was conducted with the four proposed questionnaires (Appendix B, C, D, and E) to determine the reliability of each before implementing the final survey instrument. Respondents for this pilot study were selected utilizing a convenience sampling procedure. The data for the second pilot study was collected in a hotel lobby with guests planning to leave (check out) or to register (check in) with a major hotel brand located near a major international airport. These completed surveys were utilized to check the face validity (Dillman, 2007). In addition, the pilot study was utilized to help identify any spelling or grammatical errors and insure that respondents are able to understand and correctly interpret the questions being presented to them in writing. Corrections were made to the survey instrument based on the findings of the pilot studies I and II and a corrected copy was presented to academic colleagues for review in a final effort to determine if each survey instrument was acceptable for the collection of data for the proposed study.

### **Data Analysis**

This study utilized SPSS (version 19) as the primary statistical tool to test the hypotheses and determine the relationship between the identified variables. Descriptive statistics were processed through SPSS and included mean, median, frequency and standard deviation. The first part of the study observed the effects of price increases and discounts on consumer patronage. In addition, the current study also utilized Tukey's Post Hoc test to analyze the correlational

between the independent variables of customer perceptions of fairness with regards to distributive fairness and procedural fairness with the dependent variables of customer patronage in terms of willingness-to-purchase and word-of-mouth. The instrument's test questions have been developed to represent a theoretical construct in which the previously mentioned dependent variables of fairness have a relationship on the dependent variable of customer patronage.

### **Summary and Conclusion**

This chapter outlined the methodology in this study that was used to construct the survey instrument. The purpose and description of the instrument was detailed in an effort justify the procedures selected to collect the data to be analyzed. In addition, the concepts of reliability and validity were presented in an effort to make a comparison to the study and fortify the results that were yielded. The statistical tools for data analysis were described and presented as the best methods to properly present the findings. These tools were used to check the reliability and validity of the study and include ANOVA and MANOVA. Tukey's Post hoc test was the primary statistical tool utilized for pairwise comparisons. The following chapter (Chapter 4) includes discussion of data analysis, results and discussion of the findings.

## **CHAPTER FOUR: RESULTS AND DISSCUSION**

### **Introduction**

This chapter reports the results of the analysis of the data collected. This chapter includes descriptive statistics, validity and reliability analysis, and reports the effects of violations of Procedural Fairness and Distributive Fairness on Customers' perception of fairness when measured thorough willingness to purchase and word-of-mouth. ANOVA, Tukey's Post Hoc test and MANOVA are the primary statistical tools utilized to measure these effects.

### **Hotel Profiles**

The primary data was collected over a seven-week period from three separate Central Florida hotels located in the proximity to the Orlando International Airport. Each hotel was selected in an effort to divide the respondents into three separate hotel categories as defined by Smith Travel Research. The three hotel categories represented in the study were: upper upscale, upscale and upper mid-scale (Smith Travel Research, 2012). All three hotels comprised of three separate recognizable national chain affiliations. Table 3 provides the numbers of valid responses collected from each hotel by chain scale.

**Table 3: Frequency of Participating Hotel Chain Scales**

Hotel Chain Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Upper Upscale	258	62.2	62.2	62.2
Upscale	47	11.3	11.3	73.5
Upper Mid-scale	110	26.5	26.5	100.0
Total	415	100.0	100.0	

### **Data Collection**

The questionnaire was personally administered by the Principle Investigator (PI) using an intercept approach. Surveys were collected during both weekdays and weekends in an effort to prevent bias from either leisure travelers who predominantly utilize the weekends or business travelers who dominate weekday stays. Survey instruments were collected between 7:00am and 10:00am at the hotels' breakfast location. This ensures that the guests had experienced at least one night at the hotel and were primed to respond to questions involving their present stay. During the pretesting, it was also determined that guest were more receptive during breakfast times to completing the survey instrument compared to evenings. No compensation was provided to guests for completing or attempting to complete the survey. The majority of guests were receptive to completing a survey and an estimated 80% of guests that were approached agreed to attempt to complete a survey. Four hundred and thirty three (433) survey instruments were collected from hotel guests during the initial collection phase. When reviewing the

completed survey instruments it was discovered that 18 surveys were either not completed or errors were found that called into question the reliability of the responses (i.e. two circled responses for one questions). When incomplete and unusable responses were removed, a total of four hundred and fifteen valid responses were available for further analysis.

### **Demographic Characteristics of Respondents**

The following table displays the demographic breakdown of the 415 respondents who chose to participate in the study. Table 4 shows that the majority of respondents were male with 55.2% (n= 229) with the remaining being female at 44.8% (n=186). The median age for respondents was 45.5 years, while the majority registered in the 41-50 years category (mean=38.38). The largest response for education level was for a four year college degree representing 36.7% of the respondents. The mean household income was \$76,295 per anum, while the median income was \$87,500. More than half (53%) of the respondents indicated their marital status as married with children.



**Table 4: Demographic Characteristics of Respondents**

	<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>		
Male	229	55.2
Female	186	44.8
<b>Age Group</b>		
Below 21	38	9.2
21-30	61	14.7
31-40	64	15.4
41-50	99	23.9
51-60	92	22.2
61-70	48	11.6
71 or above	13	3.1
<b>Education</b>		
High School	85	20.5
Vocational/Trade	17	4.1
Two Year College	69	16.6
Four Year College	152	36.7
Master's Degree	69	16.6
Professional Degree	23	5.5
<b>Household Income</b>		
Under \$30,000	49	11.8
\$30,000-\$54,999	53	12.8
\$55,000-74,999	50	12.0
\$75,000-\$99,999	62	14.9
\$100,000-\$149,999	119	28.7
\$150,000-\$199,999	41	9.9
\$200,000 and over	41	9.9
<b>Marital Status</b>		
Single	138	33.3
Married w/ No Children	42	10.1
Married with Children	220	53.0
Separated	9	2.2
Widowed	6	1.4

### **Trip Related Descriptive Statistics**

The respondents were asked to identify the reason for traveling at this time, and the majority (60.72%) indicated that they were traveling for leisure (table 5). It should be noted that although they were self-identified as either business or leisure at the time of the survey, this label is not mutually exclusive. This is to say that although traveling on business, the respondent may also take several leisure trips a year and vice versa.

**Table 5: Trip Related Data**

	<b>Frequency</b>	<b>Percent</b>
<b>Purpose of Trip</b>		
Business	163	39.28
Leisure	252	60.72
Total	415	100.00
<b>Business Travelers</b>		
Trips per Year (mean=22.31, median=12)		
Reimbursed for Company Travel	135	82.82
Not Reimbursed for Company Travel	28	17.18
<b>Leisure Travelers</b>		
Trips per Year (mean=4.53, median=3)		

The mean number of business trips taken was 22.31, where the median was 12. Some of the business travelers could be flying more frequently than others thus affecting the mean values. Business travelers were also asked if their lodging expenses were being reimbursed by their company and 82.82% indicated that they were being reimbursed. Leisure travelers were also segmented and their total leisure trips for the year were averaged with a mean of 4.53 and a median of 3.

### **Price Increases and Discounts Effect on Willingness-to-Purchase**

Survey respondents were asked to rate their willingness-to-purchase a hotel room in the form of making a reservation under differing variations of increases or discounts in the reference price. The reference price was established by setting a scenario in which they have previously stayed at the hotel and paid what they considered to be a fair price. Increases or discounts in price were presented in increments of \$20 based upon the findings from the pilot study detailed in the previous Methodology chapter.

Table 6 presents the descriptive statistics where the dependent variable is willingness-to-purchase. It should be noted that no missing values were found in the data set. In addition all values were within the expected range and provided no outliers.

**Table 6: Hotel Price Increase/Discount and Willingness-to-Purchase**

Dependent Variable: willingness-to-purchase			
scenario	Mean	Std. Deviation	N
+\$60	2.00	1.353	415
+\$40	3.02	1.449	415
+\$20	4.51	1.328	415
<b>+/- \$0 (even)</b>	<b>6.08</b>	<b>1.297</b>	<b>415</b>
-\$20	6.31	1.147	415
-\$40	6.42	1.162	415
-\$60	6.30	1.514	415
Total	4.95	2.139	415

Note: Scale (WTP) 1=very unlikely, 7=very likely

The test of normality showed that the independent variable is not normally distributed. This is expected because of the use of a Likert scale and the scenarios were designed in a way

that provides for answers on the extreme ends. Any attempts to transform the data to reach a normal distribution would distort the results. A Levene's Test of Equality of Error Variances proved to be significant at the  $p < 0.01$  level with an F-score of 9.13. This is expected considering lack of normality of the independent variable. From the ANOVA analysis (table 7) it is clear that the manipulations of the pricing policy had a significant effect on WTP ( $F = 774.152$ ,  $p\text{-value} < 0.001$ ). The effect size, calculated using eta squared is .616. This is to say that 61.6% of the variance in willingness-to-purchase can be attributed to the different price levels or increases/discounts in quoted price.

**Table 7: Test for Normal Distribution and Effect Size of Willingness-to-Purchase**

Tests of Between-Subjects Effects								
Dependent Variable: willingness-to-purchase								
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	8185.597 <sup>a</sup>	6	1364.266	774.152	.000	.616	4644.911	1.000
Intercept	71172.338	1	71172.338	40386.686	.000	.933	40386.686	1.000
scenario	8185.597	6	1364.266	774.152	.000	.616	4644.911	1.000
Error	5107.065	2898	1.762					
Total	84465.000	2905						
Corrected Total	13292.662	2904						

a. R Squared = .616 (Adjusted R Squared = .615)

b. Computed using alpha = .05

Table 8 presents a Tukey HSD Post Hoc Test of multiple comparisons using willingness-to-purchase as the dependent variable. The Tukey HSD Post Hoc test was utilized as it is most appropriate when the samples are similar in size (Maxwell, S.E., 1980).

**Table 8: Pairwise Comparisons of Price Increases and Discounts on Willingness-to-Purchase**

Tukey HSD

(I) scenario (J) scenario		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>+\$60</b>	+\$40	-1.02 <sup>*</sup>	.092	.000	-1.30	-.75
	+\$20	-2.51 <sup>*</sup>	.092	.000	-2.78	-2.24
	+\$0	-4.08 <sup>*</sup>	.092	.000	-4.35	-3.81
	-\$20	-4.31 <sup>*</sup>	.092	.000	-4.58	-4.04
	-\$40	-4.42 <sup>*</sup>	.092	.000	-4.70	-4.15
	-\$60	-4.30 <sup>*</sup>	.092	.000	-4.57	-4.03
<b>+\$40</b>	+\$60	1.02 <sup>*</sup>	.092	.000	.75	1.30
	+\$20	-1.49 <sup>*</sup>	.092	.000	-1.76	-1.21
	+\$0	-3.06 <sup>*</sup>	.092	.000	-3.33	-2.78
	-\$20	-3.28 <sup>*</sup>	.092	.000	-3.56	-3.01
	-\$40	-3.40 <sup>*</sup>	.092	.000	-3.67	-3.13
	-\$60	-3.28 <sup>*</sup>	.092	.000	-3.55	-3.01
<b>+\$20</b>	+\$60	2.51 <sup>*</sup>	.092	.000	2.24	2.78
	+\$40	1.49 <sup>*</sup>	.092	.000	1.21	1.76
	+\$0	-1.57 <sup>*</sup>	.092	.000	-1.84	-1.30
	-\$20	-1.80 <sup>*</sup>	.092	.000	-2.07	-1.53
	-\$40	-1.91 <sup>*</sup>	.092	.000	-2.19	-1.64
	-\$60	-1.79 <sup>*</sup>	.092	.000	-2.06	-1.52
<b>+/- \$0</b>	+\$60	4.08 <sup>*</sup>	.092	.000	3.81	4.35
	+\$40	3.06 <sup>*</sup>	.092	.000	2.78	3.33
	+\$20	1.57 <sup>*</sup>	.092	.000	1.30	1.84
	-\$20	-.23	.092	.165	-.50	.04
	-\$40	-.34 <sup>*</sup>	.092	.004	-.62	-.07
	-\$60	-.22	.092	.196	-.49	.05

(I) scenario (J) scenario		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>-\$20</b>	+\$60	4.31 <sup>*</sup>	.092	.000	4.04	4.58
	+\$40	3.28 <sup>*</sup>	.092	.000	3.01	3.56
	+\$20	1.80 <sup>*</sup>	.092	.000	1.53	2.07
	+\$0	.23	.092	.165	-.04	.50
	-\$40	-.12	.092	.872	-.39	.16
	-\$60	.01	.092	1.000	-.26	.28
<b>-\$40</b>	+\$60	4.42 <sup>*</sup>	.092	.000	4.15	4.70
	+\$40	3.40 <sup>*</sup>	.092	.000	3.13	3.67
	+\$20	1.91 <sup>*</sup>	.092	.000	1.64	2.19
	+\$0	.34 <sup>*</sup>	.092	.004	.07	.62
	-\$20	.12	.092	.872	-.16	.39
	-\$60	.12	.092	.836	-.15	.39
<b>-\$60</b>	+\$60	4.30 <sup>*</sup>	.092	.000	4.03	4.57
	+\$40	3.28 <sup>*</sup>	.092	.000	3.01	3.55
	+\$20	1.79 <sup>*</sup>	.092	.000	1.52	2.06
	+\$0	.22	.092	.196	-.05	.49
	-\$20	-.01	.092	1.000	-.28	.26
	-\$40	-.12	.092	.836	-.39	.15

Note: Scale (WTP) 1=very unlikely, 7=very likely

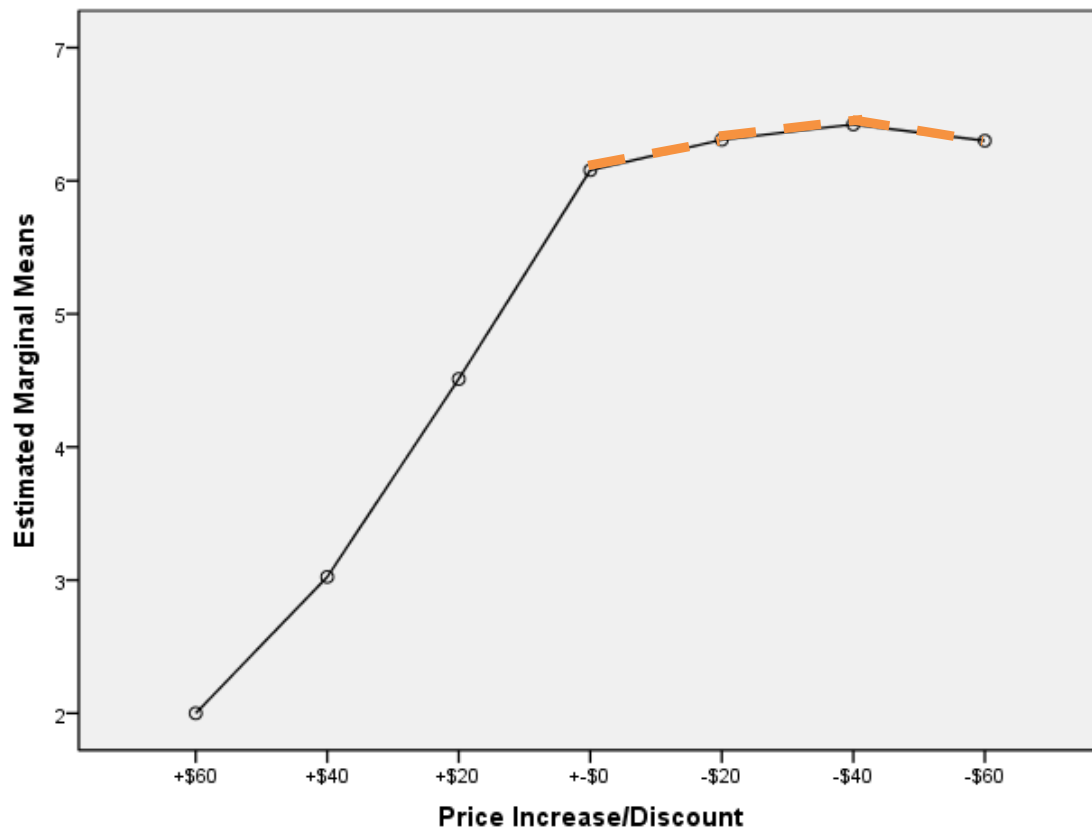
Based on observed means.

The error term is Mean Square(Error) = 1.762.

\*. The mean difference is significant at the .05 level.

Figure 7 displays the graph of each estimated mean for willingness-to-purchase.

**Figure 7: Effect of Rate Increase/Discount Effect on Willingness-to-Purchase**



The results displayed indicate that any price increases in +\$20, +\$40 and +\$60 over the reference price negatively affects the consumers' willingness-to-purchase and the results are significant at the  $p < 0.01$  level. This finding suggests that price increases over a reference price negatively affects demand in concert with the decrease in willingness-to-purchase.

When the results of discounting rate were compared to an established reference price, the only discount that is significant at the  $p < 0.05$  level is the discount of \$40. This finding suggests that the only discount that significantly affects willingness-to-purchase in a positive way is the discount of \$40 off of the reference price. A possible explanation is that consumers do not consider \$20 discount as being large enough of a difference to make the purchase.

The Utility Theory suggests that, technically, consumers should treat a discount of \$20, the same as they would treat a \$20 increase in price. The results of this study suggest that consumers treat a perceived loss of \$20 (\$20 price increase) differently than a gain of \$20 (\$20 discount). It may be said that Kahneman and Tversky's (1979) Prospect Theory applies in this situation and replaces the concept of utility with one of value. It can further state that the value function for losses is steeper than that for gains or that losses "loom larger" than gains in this study. If this was not the case, consumers in the study would have been equally affected in their willingness-to-purchase in a positive direction by a \$20 discount, as they would in a negative direction with a \$20 price increase.

A \$60 discount does not have a significant effect when compared to a discount of \$40 on a consumer's willingness-to-purchase. One plausible explanation would be that the majority of consumers' motivation to purchase is triggered at the \$40 discount level and any additional discounting beyond this did not result in additional increase in consumers' willingness-to-purchase / patronage. Deeper discounts like \$60 may make consumers question the quality of the services offered. Further studies would be required to provide a more detailed rationale behind this behavior and it can only be speculated at this point as to why this has occurred.

### **Data Analysis: Research Question 1, Hypotheses 1a, 1b and 1c**

Research Question 1: Does increasing quoted room rate, negatively affect consumer patronage in terms of willingness-to-purchase?

Willingness-to-purchase was utilized as a measurement of consumer patronage as the dependent variable and price increases were applied against the independent variable of



reference prices to determine their effect. These increases were applied stepwise in increments of \$20 based upon the findings of the previous pilot study. An Analysis of Variance (ANOVA) was performed to arrive at Mean Scores for each level of price increase and it was observed that as prices increased, willingness-to-purchase decreased. A Tukey HSD Post Hoc Test of multiple comparisons was performed to determine if these changes were significant for each Hypothesis.

***H1a:*** *The increase of a quoted price of \$20.00 in room rate compared to an expected flat price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of willingness-to-purchase.*

A change was observed in an Analysis of Variance statistical test and a Tukey Post Hoc analysis found that there was a significant difference at the  $p < 0.01$  level between the increase of \$20 (Mean Score= 4.51) over the established Reference Price (Mean Score=6.08). This observation shows that the current results support Hypothesis 1a.

***H1b:*** *The increase of a quoted price of \$40.00 in room rate compared to the increase of a quoted price of \$20.00 has a significant negative effect on consumer patronage when measured in terms of willingness-to-purchase.*

A change was observed in an Analysis of Variance statistical test and a Tukey Post Hoc analysis found that there was a significant difference at the  $p < 0.01$  level between the increase of \$40 (Mean Score= 3.02) over the established Reference Price (Mean Score=6.08). This observation shows that the results support hypothesis 1b.

***H1c:*** *The increase of a quoted price of \$60.00 in room rate compared to an expected flat price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of willingness-to-purchase.*

A change was observed in an Analysis of Variance statistical test and a Tukey Post Hoc analysis found that there was a significant difference at the  $p < 0.01$  level between the increase of

\$60 (Mean Score= 2.00) over the established Reference Price (Mean Score=6.08). This observation shows that the results support hypothesis 1c.

### **Data Analysis: Research Question 2, Hypotheses 2a, 2b and 2c**

Research Question 2: Does discounting quoted room rate, positively affect consumer patronage in terms of willingness-to-purchase?

Willingness-to-purchase was utilized as a measurement of consumer patronage as the dependent variable and price discounts were applied against the independent variable of reference prices to determine their effect. These discounts were applied stepwise in increments of \$20 based upon the findings of the previous pilot study. An Analysis of Variance (ANOVA) was performed to arrive at Mean Scores for each level of price discount and it was observed that as prices decrease, willingness-to-purchase generally increased with the exception of -\$60. A Tukey HSD Post Hoc Test of multiple comparisons was performed to determine if these changes were significant for each Hypothesis.

***H2a: The discount of a quoted price of \$20.00 in room rate compared to an expected flat price (Reference Price) will not have a different effect on consumer patronage when measured in terms of willingness-to-purchase.***

A change was observed in an Analysis of Variance statistical test between the discount of \$20 (Mean Score= 6.31) below the established reference price (Mean Score=6.08). However a Tukey Post Hoc analysis found the difference to be non-significant. This observation shows that the results do not support hypothesis 2a. A possible interpretation of this finding could be explained in that consumers do not consider a \$20 discount as the right price point to provide additional motivation in terms of willingness-to-purchase. It appears by providing the reference

price, which is the correct price in the minds of consumers, the proper price point is achieved to motivate a willingness-to-purchase decision and a 20% discount does not yield a significant advantage.

***H2b: The discount of a quoted price of \$40.00 in room rate compared to an expected flat price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of willingness-to-purchase.***

A change was observed in an Analysis of Variance statistical test and a Tukey Post Hoc analysis found that there was a significant difference at the  $p < 0.01$  level between the discount of \$40 (Mean Score= 6.42) over the established Reference Price (Mean Score=6.08). This observation shows that the results support hypothesis 2b.

***H2c: The discount of a quoted price of \$60.00 in room rate compared to an expected flat price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of willingness-to-purchase.***

A change was observed in an Analysis of Variance statistical test between the discount of \$60 (Mean Score= 6.30) below the established Reference Price (Mean Score=6.08). However a Tukey Post Hoc analysis found the difference to be non-significant. This observation shows that the results do not support hypothesis 2c. This unexpected result is unique in that it seems to go against the established Utility Theory in that it provides a lower willingness-to-purchase score than the \$40 discount (Mean Score=6.42). Utility Theory would suggest that willingness-to-purchase would not only increase compared to the \$40 discount, but that the difference would be significant from the established Reference Price. Previous studies (Nusair, Yoon, Naipaul & Parsa 2010) could explain this observed phenomenon in that it is suggested that consumers are suspicious of what appears to be too good of a deal. This leads to the supposition that willingness-to-purchase is negatively affected at a certain point in the discounting process.

### **Price Increases and Discounts Effect on Word-of-Mouth**

The same survey respondents were also asked to rate their word-of-mouth, in the form of how likely they would speak positively about the hotel to friends or family under the same differing variations of increases or discounts in the reference price to a hotel room.

Table 9 presents the descriptive statistics where the dependent variable is word-of-mouth. It should again be noted that no missing values were found in the data set. In addition all values were in the expected range and provided no outliers.

**Table 9: Hotel Price Increase/Discount and Word-of-Mouth**

Dependent Variable: word-of-mouth			
Scenario	Mean	Std. Deviation	n
+\$60	2.27	1.627	415
+\$40	3.07	1.583	415
+\$20	4.43	1.454	415
<b>+/- \$0 (even)</b>	<b>6.06</b>	<b>1.126</b>	<b>415</b>
-\$20	6.32	.988	415
-\$40	6.44	1.038	415
-\$60	6.35	1.375	415
Total	4.99	2.095	415

Note: Scale (WOM) 1=very unlikely, 7=very likely

The test of normality showed the independent variable is not normally distributed. This is expected because of the use of a Likert scale and the scenarios were designed in a way that provides for answers on the extreme ends. Any attempts to transform the data to reach a normal

distribution would distort the results. A Levene's Test of Equality of Error Variances proved to be significant at the  $p < 0.01$  level with an F-score of 37.85. This is expected considering lack of normality of the independent variable. From the ANOVA output (table 10) it is obvious that the manipulations of the pricing policy had a significant effect on WOM ( $F=709,199$ ,  $p\text{-value} < 0.001$ ). The effect size, calculated using eta squared is .595. That means 59.5% of the variance in word-of-mouth can be attributed to the different price levels or increases/discounts in quoted price.

**Table 10: Test for Normal Distribution and Effect Size for Word-of-Mouth**

Tests of Between-Subjects Effects								
Dependent Variable: word-of-mouth								
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	7585.550 <sup>a</sup>	6	1264.258	709.199	.000	.595	4255.194	1.000
Intercept	72325.310	1	72325.310	40571.637	.000	.933	40571.637	1.000
scenario	7585.550	6	1264.258	709.199	.000	.595	4255.194	1.000
Error	5166.140	2898	1.783					
Total	85077.000	2905						
Corrected Total	12751.690	2904						

a. R Squared = .595 (Adjusted R Squared = .594)

b. Computed using alpha = .05

Table 11 presents a Post Hoc Test of multiple comparisons using word-of-mouth as the independent variable. Tukey's Post Hoc test was again utilized as it is most appropriate when the samples are the exact same size.

**Table 11: Pairwise Comparisons of Price Increases and Discounts on Word-of-Mouth**

Tukey HSD

(I) scenario	(J) scenario	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>+\$60</b>	+\$40	-.80 <sup>*</sup>	.093	.000	-1.07	-.52
	+\$20	-2.16 <sup>*</sup>	.093	.000	-2.43	-1.88
	+\$0	-3.79 <sup>*</sup>	.093	.000	-4.06	-3.51
	-\$20	-4.05 <sup>*</sup>	.093	.000	-4.32	-3.77
	-\$40	-4.17 <sup>*</sup>	.093	.000	-4.44	-3.89
	-\$60	-4.08 <sup>*</sup>	.093	.000	-4.36	-3.81
<b>+\$40</b>	+\$60	.80 <sup>*</sup>	.093	.000	.52	1.07
	+\$20	-1.36 <sup>*</sup>	.093	.000	-1.63	-1.09
	+\$0	-2.99 <sup>*</sup>	.093	.000	-3.27	-2.72
	-\$20	-3.25 <sup>*</sup>	.093	.000	-3.53	-2.98
	-\$40	-3.37 <sup>*</sup>	.093	.000	-3.64	-3.10
	-\$60	-3.29 <sup>*</sup>	.093	.000	-3.56	-3.02
<b>+\$20</b>	+\$60	2.16 <sup>*</sup>	.093	.000	1.88	2.43
	+\$40	1.36 <sup>*</sup>	.093	.000	1.09	1.63
	+\$0	-1.63 <sup>*</sup>	.093	.000	-1.90	-1.36
	-\$20	-1.89 <sup>*</sup>	.093	.000	-2.17	-1.62
	-\$40	-2.01 <sup>*</sup>	.093	.000	-2.28	-1.74
	-\$60	-1.93 <sup>*</sup>	.093	.000	-2.20	-1.65
<b>+/- \$0</b>	+\$60	3.79 <sup>*</sup>	.093	.000	3.51	4.06
	+\$40	2.99 <sup>*</sup>	.093	.000	2.72	3.27
	+\$20	1.63 <sup>*</sup>	.093	.000	1.36	1.90
	-\$20	-.26	.093	.074	-.53	.01
	-\$40	-.38 <sup>*</sup>	.093	.001	-.65	-.10
	-\$60	-.30 <sup>*</sup>	.093	.024	-.57	-.02
<b>-\$20</b>	+\$60	4.05 <sup>*</sup>	.093	.000	3.77	4.32
	+\$40	3.25 <sup>*</sup>	.093	.000	2.98	3.53
	+\$20	1.89 <sup>*</sup>	.093	.000	1.62	2.17
	+\$0	.26	.093	.074	-.01	.53
	-\$40	-.12	.093	.864	-.39	.16
	-\$60	-.04	.093	1.000	-.31	.24

(I) scenario (J) scenario		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<b>-\$40</b>	+\$60	4.17 <sup>*</sup>	.093	.000	3.89	4.44
	+\$40	3.37 <sup>*</sup>	.093	.000	3.10	3.64
	+\$20	2.01 <sup>*</sup>	.093	.000	1.74	2.28
	+\$0	.38 <sup>*</sup>	.093	.001	.10	.65
	-\$20	.12	.093	.864	-.16	.39
	-\$60	.08	.093	.975	-.19	.36
<b>-\$60</b>	+\$60	4.08 <sup>*</sup>	.093	.000	3.81	4.36
	+\$40	3.29 <sup>*</sup>	.093	.000	3.02	3.56
	+\$20	1.93 <sup>*</sup>	.093	.000	1.65	2.20
	+\$0	.30 <sup>*</sup>	.093	.024	.02	.57
	-\$20	.04	.093	1.000	-.24	.31
	-\$40	-.08	.093	.975	-.36	.19

Note: Scale (WOM) 1=very unlikely, 7=very likely

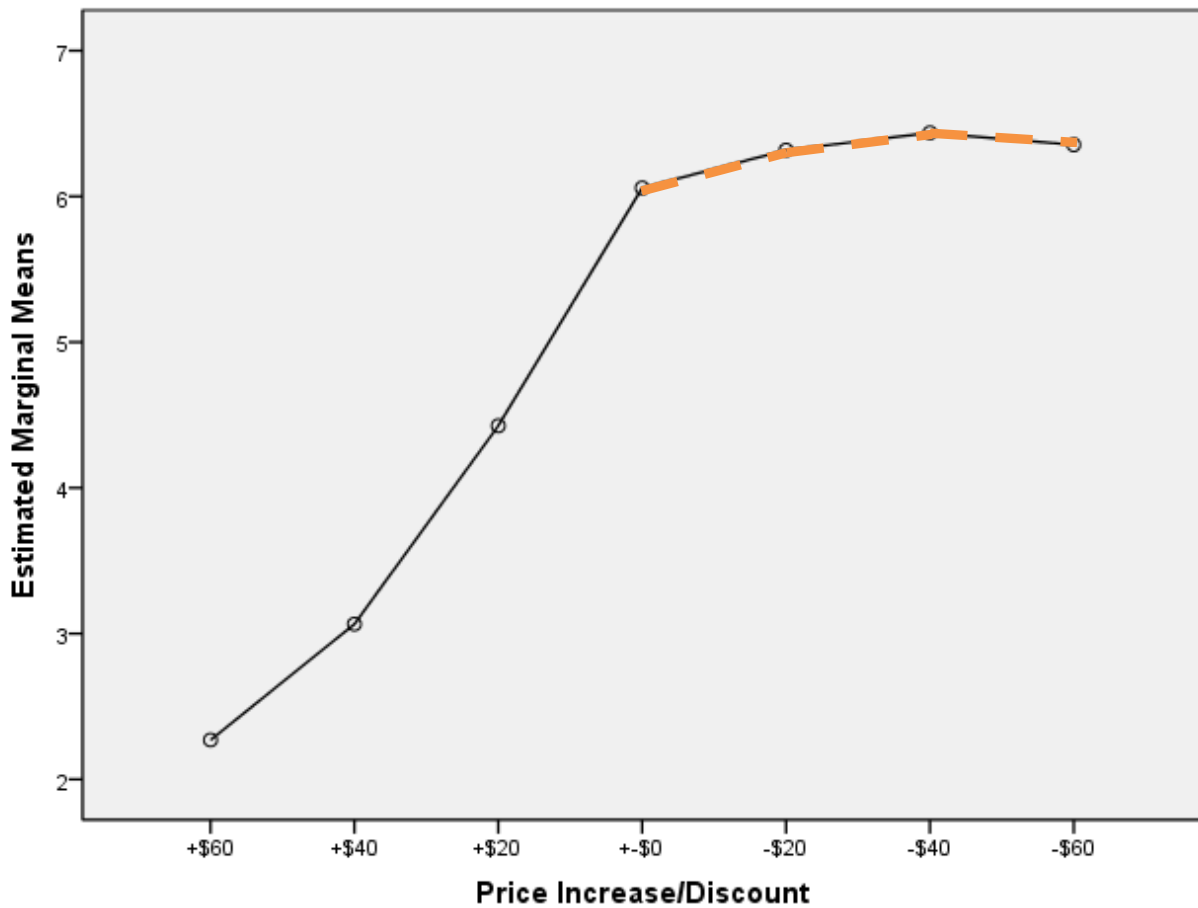
Based on observed means.

The error term is Mean Square(Error) = 1.783.

\*. The mean difference is significant at the .05 level.

Figure 8 displays the graph of each estimated mean for word-of-mouth.

**Figure 8: Effect of Rate Increase/Discount on Word-of-Mouth**



The results displayed also indicate that any price increases in +\$20, +\$40 and +\$60 over the reference price negatively affects the consumer's word-of-mouth and the results are significant at the  $p < 0.01$  level. These findings mirror the results of the willingness-to-purchase results, thus reinforcing their validity. The same can be said when viewing the results of discounting rate compared to an established reference price, the only discount that is significant at the  $p < 0.05$  level is the discount of \$40. This finding fortifies the assertion that the only discount that significantly affects willingness-to-purchase in a positive way is the discount of \$40 off of the reference price. As with willingness-to-purchase, the \$60 discount does not have a



significant effect when compared to a discount of \$40 on a consumer's willingness-to-purchase. This can be explained by the fact that when price discounts are too deep consumers begin to question the quality of the product / services. Thus the discount of \$60 is not resulting in additional proportional increase in consumer patronage.

### **Data Analysis: Research Question 3, Hypotheses 3a, 3b and 3c**

Research Question 3: Does increasing quoted room rate, negatively affect consumer patronage in terms of word-of-mouth?

Word-of-mouth was utilized as a measurement of consumer patronage as the dependent variable and price increases were applied against the independent variable of reference prices to determine their effect. These increases were applied stepwise in increments of \$20 based upon the findings of the previous pilot study. An Analysis of Variance (ANOVA) was performed to arrive at Mean Scores for each level of price increase and it was observed that as prices increased, word-of-mouth decreased. A Tukey HSD Post Hoc Test of multiple comparisons was performed to determine if these changes were significant for each Hypothesis.

***H3a:** The increase of a quoted price of \$20.00 in room rate compared to an expected flat price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of word-of-mouth.*

A change was observed in an Analysis of Variance statistical test and a Tukey Post Hoc analysis found that there was a significant difference at the  $p < 0.01$  level between the increase of \$20 (Mean Score= 4.43) over the established Reference Price (Mean Score=6.06). This observation shows that the results support hypothesis 3a.

***H3b:*** *The increase of a quoted price of \$40.00 in room rate compared to an expected flat price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of word-of-mouth.*

A change was observed in an Analysis of Variance statistical test and a Tukey Post Hoc analysis found that there was a significant difference at the  $p < 0.01$  level between the increase of \$40 (Mean Score= 3.07) over the established Reference Price (Mean Score=6.06). This observation shows that the results support hypothesis 3b.

***H3c:*** *The increase of a quoted price of \$60.00 in room rate compared to an expected flat price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of word-of-mouth.*

A change was observed in an Analysis of Variance statistical test and a Tukey Post Hoc analysis found that there was a significant difference at the  $p < 0.01$  level between the increase of \$60 (Mean Score= 2.27) over the established Reference Price (Mean Score=6.06). This observation shows that the results support hypothesis 3c.

#### **Data Analysis: Research Question 4, Hypotheses 4a, 4b and 4c**

Research Question 4: Does discounting quoted room rate, positively affect consumer patronage in terms of word-of-mouth?

Word-of-mouth was utilized as a measurement of consumer patronage as the dependent variable and price discounts were applied against the independent variable of reference prices to determine their effect. These discounts were applied stepwise in increments of \$20 based upon the findings of the previous pilot study. An Analysis of Variance (ANOVA) was performed to arrive at Mean Scores for each level of price discount and it was observed that as prices are

discounted, word-of-mouth generally increased with the exception of -\$60. A Tukey HSD Post Hoc Test of multiple comparisons was performed to determine if these changes were significant for each Hypothesis.

***H4a: The discount of a quoted price of \$20.00 in room rate compared to an expected flat price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of word-of-mouth.***

A change was observed in an Analysis of Variance statistical test between the discount of \$20 (Mean Score= 6.32) below the established Reference Price (Mean Score=6.06). However a Tukey Post Hoc analysis found the difference to be non-significant. This observation shows that the results do not support hypothesis 4a. This again supports the previous finding from the willingness-to-purchase observation of the \$20 discount. It also mirrors the explanation that consumers do not consider a \$20 discount as the right price point to provide addition motivation to affect word-of-mouth.

***H4b: The discount of a quoted price of \$40.00 in room rate compared to an expected flat price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of word-of-mouth.***

A change was observed in an Analysis of Variance statistical test and a Tukey Post Hoc analysis found that there was a significant difference at the  $p < 0.05$  level between the discount of \$40 (Mean Score= 6.44) over the established Reference Price (Mean Score=6.06). This observation shows that the results support hypothesis 4b.

***H4c: The discount of a quoted price of \$60.00 in room rate compared to an expected flat price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of word-of-mouth.***

A change was observed in an Analysis of Variance statistical test between the discount of \$60 (Mean Score= 6.35) below the established Reference Price (Mean Score=6.06). However a

Tukey Post Hoc analysis found the difference to be non-significant. This observation shows that the results do support hypothesis 4c. Like the willingness-to-purchase analysis this is an unexpected result. The observed difference seems to go against the established Utility Theory. We also observe that the \$40 discount (Mean Score=6.44) is higher in terms of word-of-mouth compared to the \$60 discount. It is again suggested that consumers are suspicious of what appears to be too good of a deal.

### **Correlation of Willingness-to-Pay and Word-of-Mouth**

Table 12 displays a Pearson Product-Moment Correlation when willingness-to-purchase and word-of-mouth are the two factors analyzed. The results displayed show that willingness-to-purchase and word-of-mouth are highly correlated with a Pearson's Correlation of 89.5%. This Correlation was also found to be significant at the  $p < 0.01$  level. The Pearson Product-Moment Correlation implies that there is linear relationship between willingness-to-purchase and word-of-mouth and as one increases by 1, the other also increases by .895.

**Table 12: Correlation Values between Willingness-to-Purchase and Word-of-Mouth at Different Price Levels**

		Willingness-to-purchase	Word-of-mouth
Willingness-to-purchase	Pearson Correlation	1	.895**
	Sig. (2-tailed)		.000
	N	2905	2905
Word-of-mouth	Pearson Correlation	.895**	1
	Sig. (2-tailed)	.000	
	N	2905	2905

\*\* . Correlation is significant at the 0.01 level (2-tailed).

A multivariate analysis of variance (MANOVA) test was also performed to determine if the mean scores of the pricing levels are similar for each of the two factors. The results of a Wilk's Lambda significance test proved to be significant at the  $p < 0.01$  level. In addition the Partial Eta Squared score achieved was .402 meaning that 40% of the variance is explained by price level.

**Table 13: MANOVA Analysis of Price Increase/Discount**

Multivariate Tests <sup>d</sup>									
Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>	
Intercept	Pillai's Trace	.942	23320.615 <sup>a</sup>	2.000	2897.000	.000	.942	46641.230	1.000
	Wilks' Lambda	.058	23320.615 <sup>a</sup>	2.000	2897.000	.000	.942	46641.230	1.000
	Hotelling's Trace	16.100	23320.615 <sup>a</sup>	2.000	2897.000	.000	.942	46641.230	1.000
	Roy's Largest Root	16.100	23320.615 <sup>a</sup>	2.000	2897.000	.000	.942	46641.230	1.000
	scenario	Pillai's Trace	.646	230.688	12.000	5796.000	.000	.323	2768.253
	Wilks' Lambda	.358	324.114 <sup>a</sup>	12.000	5794.000	.000	.402	3889.365	1.000
	Hotelling's Trace	1.781	429.726	12.000	5792.000	.000	.471	5156.712	1.000
	Roy's Largest Root	1.774	856.634 <sup>c</sup>	6.000	2898.000	.000	.639	5139.805	1.000

a. Exact statistic

b. Computed using alpha = .05

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

d. Design: Intercept + scenario

### **Procedural Fairness Violation and Various Hotel Cancellation Policies Effect on Willingness-to-Purchase**

Survey respondents were asked to rate their willingness-to-purchase a hotel room in the form of making a reservation under scenarios of violations and non-violations of procedural fairness. In addition, three hotel cancellation policies were also presented under both conditions of violation and non-violation of procedural fairness. Table 14 presents the descriptive statistics where the dependent variable is willingness-to-purchase. It should be noted that no missing values were found in the data set. In addition, all values were in the expected range and provided no outliers.

**Table 14: Procedural Fairness Violation/Non-violation and Hotel Cancellation Policies on Willingness-to-Purchase**

Dependent Variable: willingness-to-purchase

Cancellation Policy	Procedural Fairness	Mean	Std. Deviation	N
Open CXL	Non-violation	6.16	1.419	97
	Violation	1.92	1.440	114
	Total	3.87	2.556	211
48 Hours CXL	Non-violation	5.92	1.184	114
	Violation	2.32	1.702	104
	Total	4.20	2.315	218
No Refund CXL	Non-violation	2.85	1.623	103
	Violation	2.34	1.539	100
	Total	2.60	1.599	203
Total	Non-violation	4.99	2.056	314
	Violation	2.18	1.568	318
	Total	3.58	2.304	632



**Table 15: Tests of Between-Subjects Effects for Procedural Fairness Violation/Non-Violation and Hotel Cancellation Policies on Willingness-to-Purchase**

Dependent Variable: willingness-to-purchase

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	1960.477 <sup>a</sup>	5	392.095	176.874	.000	.586	884.368	1.000
Intercept	8098.600	1	8098.600	3653.265	.000	.854	3653.265	1.000
CancPol	303.870	2	151.935	68.538	.000	.180	137.075	1.000
Vial	1222.920	1	1222.920	551.657	.000	.468	551.657	1.000
CancPol * vial	409.386	2	204.693	92.337	.000	.228	184.673	1.000
Error	1387.724	626	2.217					
Total	11437.000	632						
Corrected Total	3348.201	631						

a. R Squared = .586 (Adjusted R Squared = .582)

b. Computed using alpha = .05

The results show that the type of cancellation policy significantly affects willingness-to-purchase at the  $p < 0.01$  level. The effect size, calculated using the partial eta squared score of .180 leads us to the conclusion that 18% of the variance in willingness-to-purchase is explained by the different cancellation policies. The violation of Procedural Fairness is also significant at the  $p < 0.01$  level. The effect size provided by the partial eta squared score is 46.8% of the variance in willingness-to-purchase. Further analysis shows that the interaction between Cancellation Policy type and violation/non-violation of Procedural Fairness has an additional effect size of 22.8%. The observed power for each is 100%, giving us the ability to say that the

chances of receiving a Type II error (false negative) is virtually zero. Figure 15 displays the F-scores for each interaction and the effect on willingness-to-purchase.

Table 16 presents a Tukey HSD Post Hoc Test of multiple comparisons using willingness-to-purchase as the independent variable. The Tukey HSD Post Hoc test was utilized as it is most appropriate when the samples are almost the same size.

**Table 16: Pairwise Comparisons of Various Cancellation Policies and Violation/Non-Violation of Procedural Fairness and Willingness-to-Purchase**

**Tukey HSD**

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) cell	(J) cell				Lower Bound	Upper Bound
Open CXL/Non-Vio	48HR CXL/Non-Vio	.24	.206	.844	-.34	.83
	No Ref CXL/Non-Vio	3.31 <sup>*</sup>	.211	.000	2.71	3.91
	Open CXL/Vio	4.24 <sup>*</sup>	.206	.000	3.66	4.83
	48 HR CXL/Vio	3.85 <sup>*</sup>	.210	.000	3.25	4.45
	No Ref CXL/Vio	3.82 <sup>*</sup>	.212	.000	3.22	4.43
48HR CXL/Non-Vio	Open CXL/Non-Vio	-.24	.206	.844	-.83	.34
	No Ref CXL/Non-Vio	3.07 <sup>*</sup>	.202	.000	2.49	3.65
	Open CXL/Vio	4.00 <sup>*</sup>	.197	.000	3.44	4.56
	48 HR CXL/Vio	3.60 <sup>*</sup>	.202	.000	3.03	4.18
	No Ref CXL/Vio	3.58 <sup>*</sup>	.204	.000	3.00	4.16
No Ref CXL/Non-Vio	Open CXL/Non-Vio	-3.31 <sup>*</sup>	.211	.000	-3.91	-2.71
	48HR CXL/Non-Vio	-3.07 <sup>*</sup>	.202	.000	-3.65	-2.49
	Open CXL/Vio	.93 <sup>*</sup>	.202	.000	.35	1.51
	48 HR CXL/Vio	.54	.207	.100	-.05	1.13
	No Ref CXL/Vio	.51	.209	.138	-.08	1.11
Open CXL/Vio	Open CXL/Non-Vio	-4.24 <sup>*</sup>	.206	.000	-4.83	-3.66
	48HR CXL/Non-Vio	-4.00 <sup>*</sup>	.197	.000	-4.56	-3.44
	No Ref CXL/Non-Vio	-.93 <sup>*</sup>	.202	.000	-1.51	-.35
	48 HR CXL/Vio	-.40	.202	.365	-.97	.18
	No Ref CXL/Vio	-.42	.204	.313	-1.00	.16

(I) cell	(J) cell	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
48 HR CXL/Vio	Open CXL/Non-Vio	-3.85*	.210	.000	-4.45	-3.25
	48HR CXL/Non-Vio	-3.60*	.202	.000	-4.18	-3.03
	No Ref CXL/Non-Vio	-.54	.207	.100	-1.13	.05
	Open CXL/Vio	.40	.202	.365	-.18	.97
	No Ref CXL/Vio	-.02	.209	1.000	-.62	.57
No Ref CXL/Vio	Open CXL/Non-Vio	-3.82*	.212	.000	-4.43	-3.22
	48HR CXL/Non-Vio	-3.58*	.204	.000	-4.16	-3.00
	No Ref CXL/Non-Vio	-.51	.209	.138	-1.11	.08
	Open CXL/Vio	.42	.204	.313	-.16	1.00
	48 HR CXL/Vio	.02	.209	1.000	-.57	.62

Based on observed means.

The error term is Mean Square(Error) = 2.217.

\*. The mean difference is significant at the .05 level.

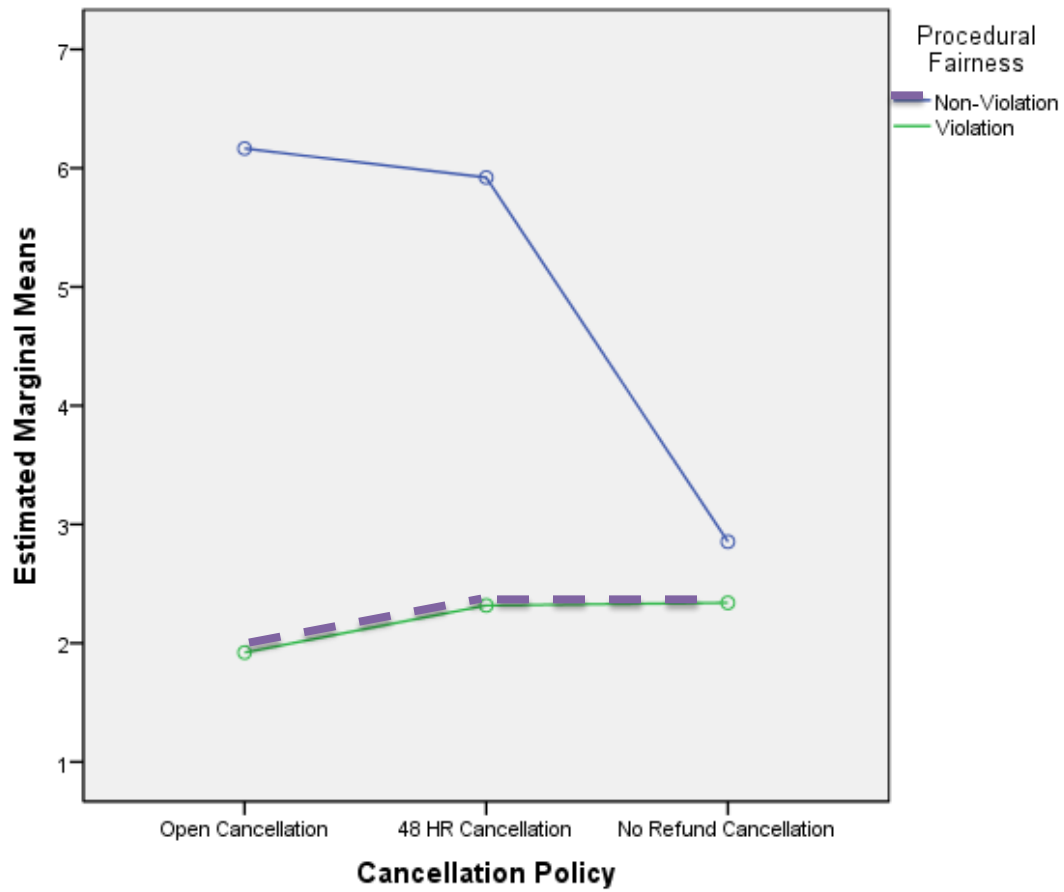
In the pairwise comparison of cancellation policies and violation/non-violation of procedural fairness and willingness-to-purchase, about half of the results appear significant which differs from the results of the-Distributive Fairness analysis presented earlier. The first instance is when the open cancellation policy with a non-violation of Procedural Fairness is compared to a 48 hour cancelation policy with a non-violation of Procedural Fairness. A possible explanation for this would be that consumers may consider that the 48 hour cancellation policy is a reasonable restriction and that any attempt to loosen the policy to a more liberal open

cancellation policy does not gain a significant advantage in convincing consumers to commit in making a hotel reservation.

The remaining non-significant results deal with the violation of Procedural Fairness. It appears that the type of Cancellation Policy is insignificant anytime there is a perceived violation of the Consumer's Procedural Fairness. This can be interpreted as consumers place greater emphasis on violation of Procedural Fairness over any advantage offered by the different types of cancellation policies.

Figure 9 displays a graphical representation of each condition with the top line representing a non-violation and the bottom line representing a violation of Procedural Fairness.

**Figure 9: Hotel Cancellation Policies and Willingness-to-Purchase**



### **Data Analysis: Research Question 5, Hypotheses 5a, 5b and 5c**

Research Question 5: Do different hotel cancellation policies have a moderating effect on consumer patronage in terms of willingness-to-purchase?

Willingness-to-purchase was utilized as a measurement of consumer patronage as the dependent variable and was applied against the independent variable of three established hotel cancellation policies to determine their rank order. An Analysis of Variance (ANOVA) was performed to arrive at Mean Scores for each of the three cancellation policies and it was observed that as each policy became stricter, willingness-to-purchase decreased and appeared to establish a ranking order. A Tukey HSD Post Hoc Test of multiple comparisons was also performed to determine if these changes were significant for each Hypothesis.

***H5a:** In a condition without a violation of Procedural Fairness or Distributive Fairness, consumer patronage in terms of willingness-to-purchase is highest when an open cancellation policy is implemented when compared with 48 hour cancelation policy.*

A change was observed in an Analysis of Variance (ANOVA) statistical test and an open cancellation policy ranked at the top of those compared. However a Tukey Post Hoc analysis found the difference to be non-significant when compared to a 48 hour cancellation policy. This observation shows that the results do not support hypothesis 5a.

This is to say that the open cancellation policy (Mean Score= 6.16) does appear to be higher than the 48 hour policy (Mean Score= 5.92), however the difference is not significant at the  $p < 0.05$  level from the 48 hour policy when viewing the results of the Tukey Post Hoc pairwise comparison. A possible explanation is that in terms of consumer patronage, the difference is negligible and appears to be near equal for the two policies. Additional testing could produce results where the 48 hour cancellation policy could score equal or higher than the open

cancellation policy. One cannot definitively state that the open cancellation policy is the highest in terms of willingness-to-purchase.

***H5b:*** *In a condition without a violation of Procedural Fairness or Distributive Fairness, consumer patronage in terms of willingness-to-purchase is highest when an open cancellation policy is implemented when compared with no refund cancelation policy.*

A change was observed in an Analysis of Variance (ANOVA) statistical test and the No refund cancellation policy (Mean Score= 2.85) ranked at the bottom of those compared. The Tukey Post Hoc analysis found the difference to be significant at the  $p < 0.01$  level when compared to an open cancellation (Mean Score= 6.16). This observation shows that the results support hypothesis 5b.

***H5c:*** *In a condition without a violation of procedural fairness or distributive fairness, consumer patronage in terms of willingness-to-purchase is highest when a 48 hour cancellation policy is implemented when compared with No refund cancelation policy.*

A change was observed in an Analysis of Variance statistical test and an open cancellation policy ranked below the 48 hour cancellation policy. The Tukey Post Hoc analysis did find that the 48 hour cancellation policy (Mean Score= 5.92) was ranked significantly higher than the no refund cancellation policy (Mean Score= 2.85) at the  $p < 0.01$  level. This observation shows that the results support hypothesis 5c.



**Procedural Fairness Violation and Various Hotel Cancellation Policies Effect on Word-of-Mouth**

Survey respondents were asked to rate their word-of-mouth for a hotel in the form of making a reservation under scenarios of violations and non-violations of procedural fairness. In addition, three hotel cancellation policies were also presented under both conditions of violation and non-violation of procedural fairness. Table 17 presents the descriptive statistics where the dependent variable is word-of-mouth. It should be noted that no missing values were found in the data set. In addition, all values were in the expected range and provided no outliers.

**Table 17: Procedural Fairness Violation/Non-violation and Hotel Cancellation Policies on Word-of-Mouth**

Dependent Variable: word-of-mouth

Cancelation Policy	Procedural Fairness	Mean	Std. Deviation	N
Open CXL	Non-violation	6.05	1.564	97
	Violation	1.86	1.545	114
	Total	3.79	2.605	211
48 Hours CXL	Non-violation	5.83	1.363	114
	Violation	2.21	1.755	104
	Total	4.11	2.391	218
No Refund CXL	Non-violation	2.62	1.547	103
	Violation	2.17	1.564	100
	Total	2.40	1.568	203
Total	Non-violation	4.85	2.153	314
	Violation	2.07	1.625	318
	Total	3.45	2.357	632

Note: Scale (WOM) 1=very unlikely, 7=very likely

The test of normality showed the independent variable is not normally distributed. This expected because of the use of a Likert scale and the scenarios were designed in a way that provides for answers on the extreme ends. Any attempts to transform the data to reach a normal distribution would distort the results. A Levene's Test of Equality of Error Variances proved to be significant at the  $p < 0.01$  level with an F-score of 3.26. This is expected considering lack of normality of the independent variable. From the ANOVA output (table 18) we can see that the manipulations of the three cancellation policies had a significant effect on WOM ( $F=72.175$ ,  $p$ -value  $< 0.001$ ).

**Table 18: Effects for Procedural Fairness Violation/Non-violation and Hotel Cancellation Policies on Word-of-Mouth**

Dependent Variable: word-of-mouth

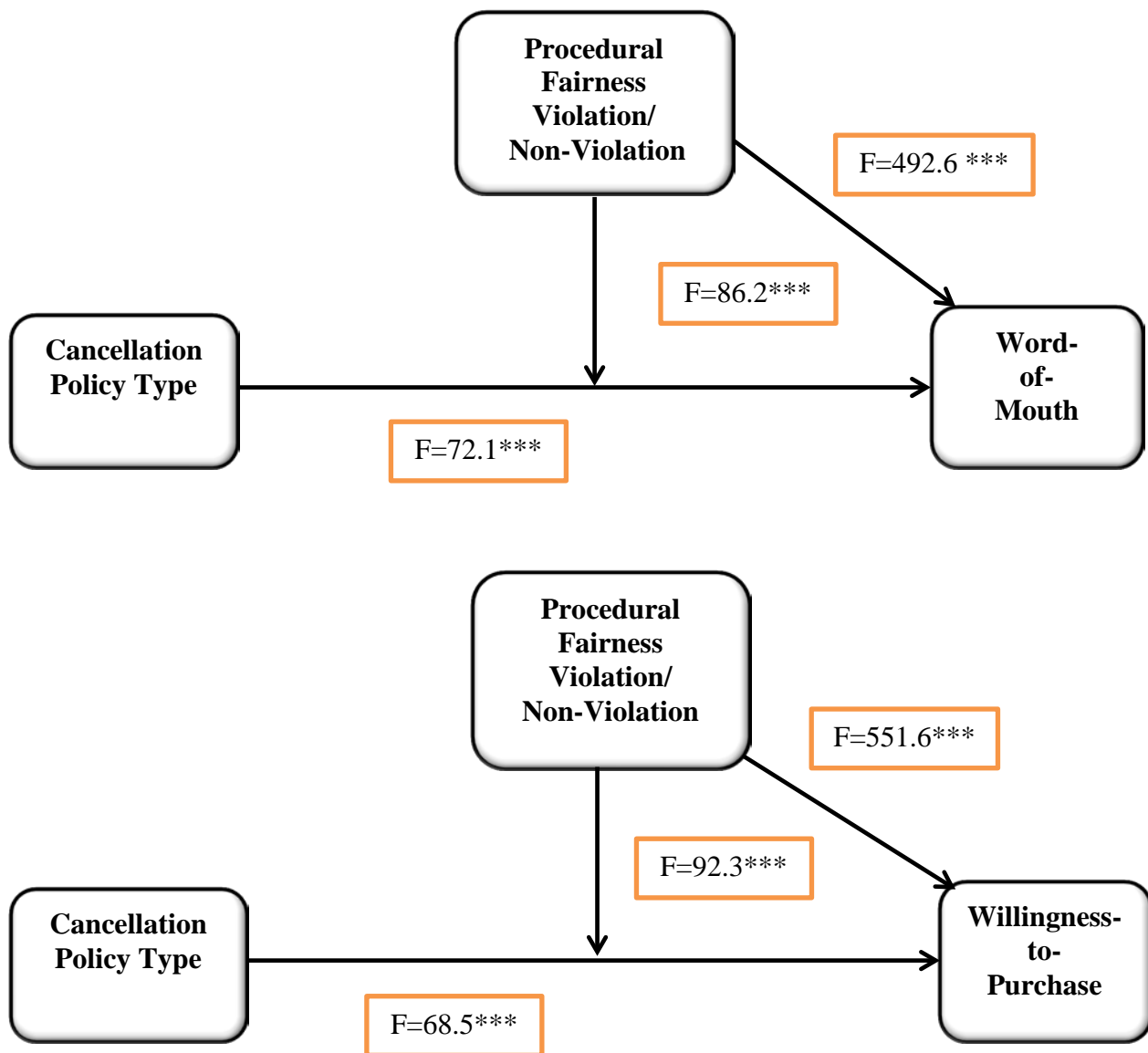
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	1986.460 <sup>a</sup>	5	397.292	163.835	.000	.567	819.176	1.000
Intercept	7528.442	1	7528.442	3104.575	.000	.832	3104.575	1.000
CancPol	350.042	2	175.021	72.175	.000	.187	144.350	1.000
Vial	1194.725	1	1194.725	492.680	.000	.440	492.680	1.000
CancPol * vial	418.129	2	209.065	86.214	.000	.216	172.428	1.000
Error	1518.019	626	2.425					
Total	11031.000	632						
Corrected Total	3504.479	631						

a. R Squared = .567 (Adjusted R Squared = .563)

b. Computed using alpha = .05

These results again show that the type of cancellation policy significantly affects word-of-mouth at the  $p < 0.01$  level. The effect size, calculated using the partial eta squared score of .187 leads us to the conclusion that 18.7% of the variance in word-of-mouth is explained by the different cancellation policies. The violation of Distributive Fairness is also significant at the  $p < 0.01$  level. The effect size provided by the partial eta squared score is 44% of the variance in word-of-mouth. Further analysis shows that the interaction between Cancellation Policy type and violation/non-violation of Distributive Fairness has an additional effect size of 21.6%. The observed power for each is 100%, giving us the ability to say that the chances of receiving a Type II error (false negative) is again virtually zero. Figure 18 displays the F-scores for each interaction and the effect on word-of-mouth.

**Figure 10: F-scores for Procedural Fairness Violation/Non-violation and Hotel Cancellation Policies on Willingness-to-Purchase and Word-of-Mouth**



Note= \*sig at <.05, \*\*sig at <.01, \*\*\* sig at <.001

Table 19 presents a Tukey HSD Post Hoc Test of multiple comparisons using willingness-to-purchase as the independent variable. The Tukey HSD Post Hoc test was utilized as it is most appropriate when the samples are almost the same size.

**Table 19: Pairwise Comparisons of Various Cancellation Policies and Violation/Non-Violation of Procedural Fairness and Word-of-Mouth**

Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) cell	(J) cell				Lower Bound	Upper Bound
Open CXL/Non-Vio	48HR CXL/Non-Vio	.22	.215	.913	-.40	.83
	No Ref CXL/Non-Vio	3.43 <sup>*</sup>	.220	.000	2.80	4.06
	Open CXL/Vio	4.19 <sup>*</sup>	.215	.000	3.58	4.81
	48 HR CXL/Vio	3.84 <sup>*</sup>	.220	.000	3.21	4.47
	No Ref CXL/Vio	3.88 <sup>*</sup>	.222	.000	3.25	4.52
48HR CXL/Non-Vio	Open CXL/Non-Vio	-.22	.215	.913	-.83	.40
	No Ref CXL/Non-Vio	3.21 <sup>*</sup>	.212	.000	2.61	3.82
	Open CXL/Vio	3.97 <sup>*</sup>	.206	.000	3.38	4.56
	48 HR CXL/Vio	3.62 <sup>*</sup>	.211	.000	3.02	4.23
	No Ref CXL/Vio	3.66 <sup>*</sup>	.213	.000	3.05	4.27
No Ref CXL/Non-Vio	Open CXL/Non-Vio	-3.43 <sup>*</sup>	.220	.000	-4.06	-2.80
	48HR CXL/Non-Vio	-3.21 <sup>*</sup>	.212	.000	-3.82	-2.61
	Open CXL/Vio	.76 <sup>*</sup>	.212	.005	.16	1.37
	48 HR CXL/Vio	.41	.216	.407	-.21	1.03
	No Ref CXL/Vio	.45	.219	.307	-.17	1.08
Open CXL/Vio	Open CXL/Non-Vio	-4.19 <sup>*</sup>	.215	.000	-4.81	-3.58
	48HR CXL/Non-Vio	-3.97 <sup>*</sup>	.206	.000	-4.56	-3.38
	No Ref CXL/Non-Vio	-.76 <sup>*</sup>	.212	.005	-1.37	-.16
	48 HR CXL/Vio	-.35	.211	.555	-.96	.25
	No Ref CXL/Vio	-.31	.213	.693	-.92	.30
48 HR CXL/Vio	Open CXL/Non-Vio	-3.84 <sup>*</sup>	.220	.000	-4.47	-3.21
	48HR CXL/Non-Vio	-3.62 <sup>*</sup>	.211	.000	-4.23	-3.02
	No Ref CXL/Non-Vio	-.41	.216	.407	-1.03	.21
	Open CXL/Vio	.35	.211	.555	-.25	.96
	No Ref CXL/Vio	.04	.218	1.000	-.58	.66

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) cell	(J) cell				Lower Bound	Upper Bound
No Ref CXL/Vio	Open CXL/Non-Vio	-3.88 <sup>*</sup>	.222	.000	-4.52	-3.25
	48HR CXL/Non-Vio	-3.66 <sup>*</sup>	.213	.000	-4.27	-3.05
	No Ref CXL/Non-Vio	-.45	.219	.307	-1.08	.17
	Open CXL/Vio	.31	.213	.693	-.30	.92
	48 HR CXL/Vio	-.04	.218	1.000	-.66	.58

Based on observed means.

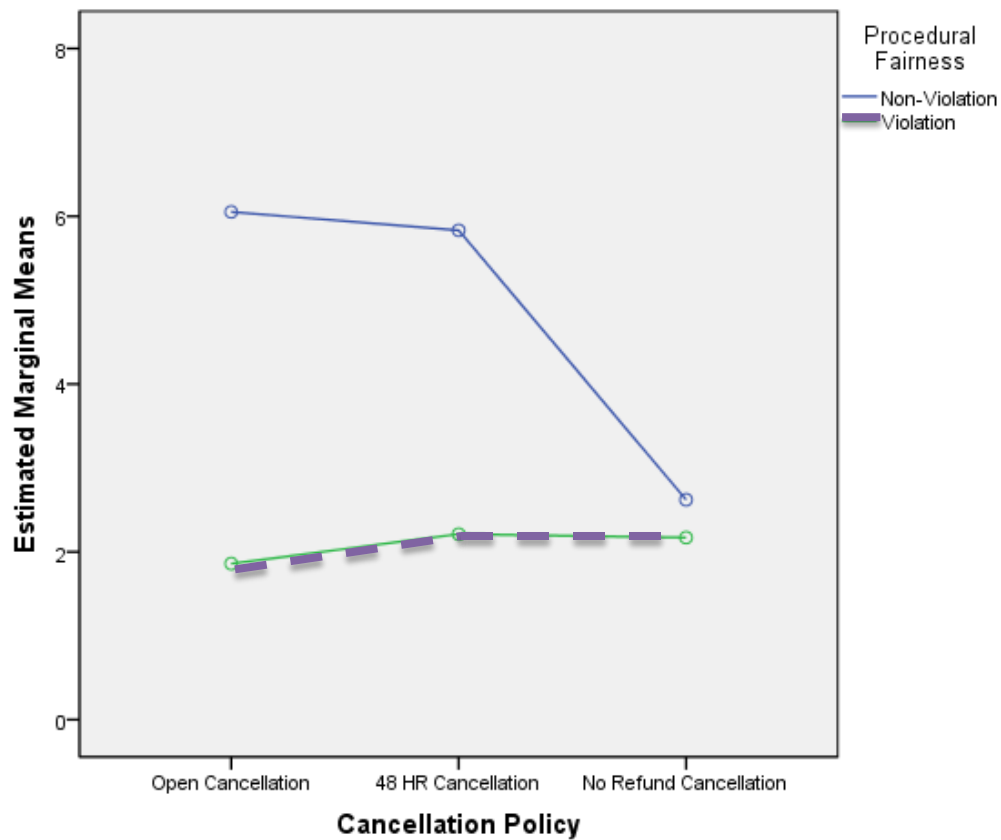
The error term is Mean Square(Error) = 2.425.

\*. The mean difference is significant at the .05 level.

In the pairwise comparison of Cancellation Policies and violation/non-violation of Procedural Fairness and word-of-mouth, the results mirror the findings for willingness-to-Purchase. These findings reinforce the interpretation of the results that there is little difference in the perception of the consumer regarding the open cancellation policy and 48 hour cancellation policy. In addition, a perceived Procedural Fairness violation has more weight in the consumer patronage decision than any variation in hotel cancellation policy.

Figure 11 displays a graphical representation of each condition with the top line representing a non-violation and the bottom line representing a violation of Procedural Fairness.

**Figure 11: Cancellation Policies and Word-of-Mouth**



**Data Analysis: Research Question 6, Hypotheses 6a, 6b and 6c**

Research Question 6: Do different hotel cancellation policies have a moderating effect on consumer patronage in terms of word-of-mouth?

Word-of-mouth was utilized as a measurement of consumer patronage as the dependent variable and was applied against the independent variable of three established hotel cancellation policies to determine their rank order. An Analysis of Variance (ANOVA) was performed to arrive at Mean Scores for each of the three cancellation policies and it was observed that as each policy became stricter, word-of-mouth decreased and appeared to establish a ranking order. A



Tukey HSD Post Hoc Test of multiple comparisons was also performed to determine if these changes were significant for each Hypothesis.

***H6a: In a condition without a violation of Procedural Fairness or Distributive Fairness, consumer patronage in terms of word-of-mouth is highest when an open cancellation policy is implemented when compared with a 48 hour cancelation policy.***

A change was observed in an Analysis of Variance statistical test and an open cancellation policy (Mean Score=6.05) ranked at the top of those compared. However a Tukey Post Hoc analysis found the difference to be non-significant when compared to a 48 hour cancellation policy (Mean Score=5.83). This observation shows that the results do not support hypothesis 6a. These results mirror the results for willingness-to-purchase in that the open cancellation policy does appear to be higher than the 48 hour policy, however the difference is not significant at the  $p < 0.05$  level. Again it appears that in terms of consumer patronage, the difference is negligible and appears to be near equal for the two policies. We cannot affirmatively state that the open cancellation policy is the highest in terms of word-of-mouth.

***H6b: In a condition without a violation of Procedural Fairness or Distributive Fairness, consumer patronage in terms of word-of-mouth is highest when an open cancellation policy is implemented when compared with a no refund cancelation policy.***

A change was observed in an Analysis of Variance statistical test and no refund cancellation policy (Mean Score=2.62) ranked at the bottom of those compared. The Tukey Post Hoc analysis found the difference to be significant at the  $p < 0.01$  level when compared to an open cancellation policy (Mean Score=6.05). This observation shows that the results support hypothesis 6b.

***H6c: In a condition without a violation of Procedural Fairness or Distributive Fairness, consumer patronage in terms of word-of-mouth is highest when a 48 hour cancellation Policy is implemented when compared with no refund cancelation.***

A change was observed in an Analysis of Variance statistical test and no refund cancellation policy (Mean Score=2.62) ranked at the bottom of those compared. The Tukey Post Hoc analysis found the difference to be significant at the  $p < 0.01$  level when compared to a 48 hour cancellation policy (Mean Score=5.83). This observation shows that the results support hypothesis 6c.

### **Data Analysis: Research Question 7, Hypotheses 7a, 7b and 7c**

Research Question 7: Does the violation of Procedural Fairness have a moderating effect on consumer patronage in terms of willingness-to-purchase?

Willingness-to-purchase was utilized as a measurement of consumer patronage as the dependent variable and a situation of the violation of procedural fairness was applied against the independent variable of three established hotel cancellation policies. An Analysis of Variance (ANOVA) was performed to arrive at Mean Scores for each of the three cancellation policies and these were compared to the existing Mean Scores when the Procedural Fairness was Not Violated. It was observed that when a Procedural violation took place willingness-to-purchase decreased. A Tukey HSD Post Hoc Test of multiple comparisons was also performed to determine if these changes were significant for each Hypothesis.

***H7a: The violation of Procedural Fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and an open cancellation policy.***

In the case of an open cancellation policy, a non-violation of Procedural Fairness Mean Score of 6.16 was returned for willingness-to-purchase compared to a score of 1.92 for a

violation. The difference is significant at  $p < 0.01$  level. This observation shows that the results support hypothesis 7a.

***H7b:*** *The violation of Procedural Fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and a 48 hour cancellation policy.*

In the case of a 48 hour cancellation policy, a non-violation of Procedural Fairness Mean Score of 5.92 was returned for willingness-to-purchase compared to a score of 2.33 for a violation. The difference is significant at  $p < 0.01$  level. This observation shows that the results support hypothesis 7b.

***H7c:*** *The violation of Procedural Fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and a no refund penalty cancellation policy.*

In the case of a no refund cancellation policy, a non-violation of Procedural Fairness Mean Score of 2.85 was returned for willingness-to-purchase compared to a score of 2.34 for a violation. However this observed difference is not significant. This observation shows that the results do not support hypothesis 7c. These results could indicate that in terms of willingness-to-purchase, consumers believe the no refund policy is so distasteful that their opinion is not moderated by a violation of Procedural Fairness when compared to a non-violation. One could infer that the implementation of a no refund policy takes a higher priority in terms of willingness-to-purchase in the order of the purchase decision.

### **Data Analysis: Research Question 8, Hypotheses 8a, 8b and 8c**

Research Question 8: Does the violation of Procedural Fairness have a moderating effect on consumer patronage in terms of word-of-mouth?

Word-of-mouth was utilized as a measurement of consumer patronage as the dependent variable and a situation of the violation of Procedural Fairness was applied against the independent variable of three established hotel cancellation policies. An Analysis of Variance (ANOVA) was performed to arrive at Mean Scores for each of the three cancellation policies and these were compared to the existing Mean Scores when the Procedural Fairness was Not Violated. It was observed that when a Procedural violation took place word-of-mouth decreased. A Tukey HSD Post Hoc Test of multiple comparisons was also performed to determine if these changes were significant for each Hypothesis.

***H8a:** The violation of Procedural Fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and an open cancellation policy.*

In the case of an open cancellation policy, a non-violation of Procedural Fairness Mean Score of 6.05 was returned for word-of-mouth compared to a score of 1.86 for a violation. The difference is significant at  $p < 0.01$  level. This observation shows that the results support hypothesis 8a.

***H8b:** The violation of Procedural Fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and a 48 hour cancellation policy.*

In the case of a 48 hour cancellation policy, a non-violation of Procedural Fairness Mean Score of 5.83 was returned for word-of-mouth compared to a score of 2.21 for a violation. The

difference is significant at  $p < 0.01$  level. This observation shows that the results **support** hypothesis 8b.

***H8c:** The violation of Procedural Fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and a no refund penalty cancellation policy.*

In the case of a no refund cancellation policy, a non-violation of Procedural Fairness Mean Score of 2.62 was returned for word-of-mouth compared to a score of 2.17 for a violation. However this observed difference is not significant. This observation shows that the results do not support hypothesis 8c. These results mirror the willingness-to-purchase results and could indicate that in terms of word-of-mouth, consumers believe the no refund policy is again so distasteful that their opinion is not moderated by a violation of Procedural Fairness when compared to a non-violation.

#### **Effect of Distributive Fairness Violation and Various Hotel Cancellation Policies on Willingness-to-Purchase**

Survey respondents were asked to rate their willingness-to-purchase a hotel room in the form of making a reservation under scenarios of violations and non-violations of distributive fairness. In addition, three hotel cancellation policies were also presented under both conditions of violation and non-violation of distributive fairness. Table 20 presents the descriptive statistics where the dependent variable is willingness-to-purchase. It should be noted that no missing values were found in the data set. In addition, all values were in the expected range and provided no outliers.

**Table 20: Distributive Fairness Violation/Non-Violation and Hotel Cancellation Policies on Willingness-to-Purchase**

Dependent Variable: willingness-to-purchase

Cancellation Policy	Distributive Fairness	Mean	Std. Deviation	N
Open CXL	Non-violation	6.17	1.205	103
	Violation	4.50	1.784	100
	Total	5.34	1.729	203
48 Hours CXL	Non-violation	5.25	1.817	100
	Violation	2.33	1.839	96
	Total	3.82	2.337	196
No Refund CXL	Non-violation	3.57	1.828	96
	Violation	3.03	1.855	114
	Total	3.28	1.859	210
Total	Non-violation	5.03	1.951	299
	Violation	3.29	2.025	310
	Total	4.14	2.170	609

Note: Scale (WTP) 1=very unlikely, 7=very likely

The test of normality showed the independent variable is not normally distributed. This expected because of the use of a Likert scale and the scenarios were designed in a way that provides for answers on the extreme ends. Any attempts to transform the data to reach a normal distribution would distort the results. A Levene's Test of Equality of Error Variances proved to be significant at the  $p < 0.01$  level with an F-score of 8.55. This is expected considering lack of normality of the independent variable. From the ANOVA output (table 21) we can see that the manipulations of the three different cancellation policies had a significant effect on WOM ( $F=76,237$ ,  $p\text{-value} < 0.001$ ). Table 21 displays the test between subject effects and describes the interaction effect between different variables.

**Table 21: Effects for Distributive Fairness Violation/Non-Violation and Hotel Cancellation Policies on Willingness-to-Purchase**

Dependent Variable: willingness-to-purchase

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	1044.167 <sup>a</sup>	5	208.833	69.278	.000	.365	346.392	1.000
Intercept	10409.076	1	10409.076	3453.108	.000	.851	3453.108	1.000
CancPol	459.617	2	229.808	76.237	.000	.202	152.473	1.000
Vial	443.397	1	443.397	147.092	.000	.196	147.092	1.000
CancPol * vial	141.860	2	70.930	23.530	.000	.072	47.061	1.000
Error	1817.688	603	3.014					
Total	13306.000	609						
Corrected Total	2861.856	608						

a. R Squared = .365 (Adjusted R Squared = .360)

b. Computed using alpha = .05

These results show that the type of cancellation policy significantly affects willingness-to-purchase at the  $p < 0.01$  level. The effect size, calculated using the partial eta squared score of .202 leads us to the conclusion that 20.2% of the variance in willingness-to-purchase is explained by the different cancellation policies. The violation of distributive fairness is also significant at the  $p < 0.01$  level. The effect size provided by the partial eta squared score is 19.6% of the variance in willingness-to-purchase. Further analysis shows that the interaction between Cancellation Policy type and violation/non-violation of Distributive Fairness has an additional effect size of 7.2%. The observed power for each is 100%, giving us the ability to say that the

chances of receiving a Type II error (false negative) is virtually zero. Figure 21 displays the F-scores for each interaction and the effect on willingness-to-purchase.

Table 22 presents a Tukey HSD Post Hoc Test of multiple comparisons using willingness-to-purchase as the independent variable. The Tukey HSD Post Hoc test was utilized as it is most appropriate when the samples are almost the same size.



**Table 22: Pairwise Comparisons of Various Cancellation Policies and Violation/Non-Violation of Distributive Fairness and Willingness-to-Purchase**

Tukey HSD

(I) cell	(J) cell	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Open CXL/Non-Vio	48HR CXL/Non-Vio	.92 <sup>*</sup>	.244	.003	.22	1.61
	No Ref CXL/Non-Vio	2.59 <sup>*</sup>	.246	.000	1.89	3.30
	Open CXL/Vio	1.67 <sup>*</sup>	.244	.000	.97	2.36
	48 HR CXL/Vio	3.83 <sup>*</sup>	.246	.000	3.13	4.54
	No Ref CXL/Vio	3.14 <sup>*</sup>	.236	.000	2.46	3.81
48HR CXL/Non-Vio	Open CXL/Non-Vio	-.92 <sup>*</sup>	.244	.003	-1.61	-.22
	No Ref CXL/Non-Vio	1.68 <sup>*</sup>	.248	.000	.97	2.39
	Open CXL/Vio	.75 <sup>*</sup>	.246	.028	.05	1.45
	48 HR CXL/Vio	2.92 <sup>*</sup>	.248	.000	2.21	3.63
	No Ref CXL/Vio	2.22 <sup>*</sup>	.238	.000	1.54	2.90
No Ref CXL/Non-Vio	Open CXL/Non-Vio	-2.59 <sup>*</sup>	.246	.000	-3.30	-1.89
	48HR CXL/Non-Vio	-1.68 <sup>*</sup>	.248	.000	-2.39	-.97
	Open CXL/Vio	-.93 <sup>*</sup>	.248	.003	-1.64	-.22
	48 HR CXL/Vio	1.24 <sup>*</sup>	.251	.000	.52	1.96
	No Ref CXL/Vio	.55	.241	.207	-.14	1.23
Open CXL/Vio	Open CXL/Non-Vio	-1.67 <sup>*</sup>	.244	.000	-2.36	-.97
	48HR CXL/Non-Vio	-.75 <sup>*</sup>	.246	.028	-1.45	-.05
	No Ref CXL/Non-Vio	.93 <sup>*</sup>	.248	.003	.22	1.64
	48 HR CXL/Vio	2.17 <sup>*</sup>	.248	.000	1.46	2.88
	No Ref CXL/Vio	1.47 <sup>*</sup>	.238	.000	.79	2.15
48 HR CXL/Vio	Open CXL/Non-Vio	-3.83 <sup>*</sup>	.246	.000	-4.54	-3.13
	48HR CXL/Non-Vio	-2.92 <sup>*</sup>	.248	.000	-3.63	-2.21
	No Ref CXL/Non-Vio	-1.24 <sup>*</sup>	.251	.000	-1.96	-.52
	Open CXL/Vio	-2.17 <sup>*</sup>	.248	.000	-2.88	-1.46
	No Ref CXL/Vio	-.69 <sup>*</sup>	.241	.047	-1.38	-.01

(I) cell	(J) cell	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
No Ref CXL/Vio	Open CXL/Non-Vio	-3.14*	.236	.000	-3.81	-2.46
	48HR CXL/Non-Vio	-2.22*	.238	.000	-2.90	-1.54
	No Ref CXL/Non-Vio	-.55	.241	.207	-1.23	.14
	Open CXL/Vio	-1.47*	.238	.000	-2.15	-.79
	48 HR CXL/Vio	.69*	.241	.047	.01	1.38

Based on observed means.

The error term is Mean Square(Error) = 3.014.

\*. The mean difference is significant at the .05 level.

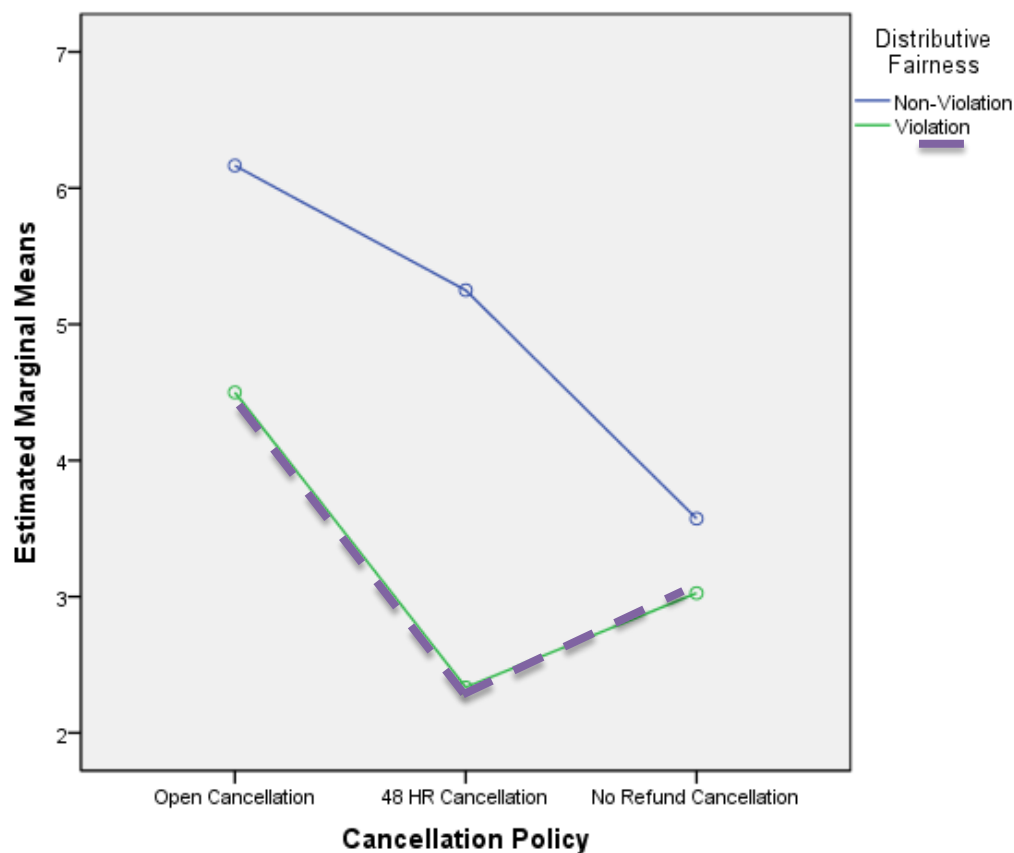
In the pairwise comparison of cancellation policies and violation/non-violation of distributive fairness and willingness-to-purchase, all results appear significant with three exceptions. The first instance is when a 48 hour cancellation policy with a non-violation of distributive fairness is compared to an open cancelation policy with a violation of distributive fairness. A possible explanation for this would be that consumers feel that the relatively liberal policy of allowing them to cancel until the check-in is not enough of a compensation for a situation in which they feel their distributive fairness is violated.

The second instance is for a no refund cancellation policy when distributive fairness is both violated and not violated. This would indicate that consumers do not favor a no refund policy irrespective of the circumstances and may consider the policy to be unreasonable whether they are treated fairly or not in the process.

The third instance is the 48 hour cancellation policy and no refund cancellation policy when there is a violation of distributive fairness. This would indicate that any violation of distributive fairness takes priority over the liberalness of the cancellation policy and the violation has a greater effect on willingness-to-purchase over the type of cancellation policy in place.

Figure 12 displays a graphical representation of each condition with the top line representing a non-violation and the bottom line representing a violation of distributive fairness.

**Figure 12: Distributive Fairness and Willingness-to-Purchase**



### **Data Analysis: Research Question 9, Hypotheses 9a, 9b and 9c**

Research Question 9: Does the violation of distributive fairness have a moderating effect on consumer patronage in terms of willingness-to-purchase?

Willingness-to-purchase was utilized as a measurement of consumer patronage as the dependent variable and a situation of the violation of Distributive Fairness was applied against the independent variable of three established hotel cancellation policies. An Analysis of Variance (ANOVA) was performed to arrive at Mean Scores for each of the three cancellation policies and these were compared to the existing Mean Scores when the Distributive Fairness was Not Violated. It was observed that when a Distributive Fairness violation took place willingness-to-purchase decreased. A Tukey HSD Post Hoc Test of multiple comparisons was also performed to determine if these changes were significant for each Hypothesis.

***H9a:** The violation of Distributive Fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and an open cancellation policy.*

In the case of an open cancellation policy, a non-violation of Distributive Fairness Mean Score of 6.17 was returned for willingness-to-purchase compared to a score of 4.50 for a violation. The difference is significant at  $p < 0.01$  level. This observation shows that the results support hypothesis 9a.

***H9b:** The violation of Distributive Fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and a 48 hour cancellation policy.*

In the case of a 48 hour cancellation policy, a non-violation of Distributive Fairness Mean Score of 5.25 was returned for willingness-to-purchase compared to a score of 2.33 for a

violation. The difference is significant at  $p < 0.01$  level. This observation shows that the results support hypothesis 9b.

***H9c: The violation of Distributive Fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and a no refund penalty cancellation policy.***

In the case of a no refund cancellation policy, a non-violation of Distributive Fairness Mean Score of 3.57 was returned for willingness-to-purchase compared to a Mean Score of 3.03 for a violation. However this observed difference is not significant. This observation shows that the results do not support hypothesis 9c. These results are the same as the Procedural violation/non-violation and reinforce the supposition that in terms of willingness-to-purchase, consumers believe the no refund policy is so negatively perceived that it is not moderated by a violation of distributive fairness when compared to a non-violation. This also reinforces the supposition that the implementation of a no refund policy takes a higher priority in terms of willingness-to-purchase in the order of the purchase decision.

### **Effect of Distributive Fairness Violation and Various Hotel Cancellation Policies on Word-of-Mouth**

Survey respondents were asked to rate their word-of-mouth for a hotel in the form of making a reservation under scenarios of violations and non-violations of Distributive Fairness. In addition, three hotel cancellation policies were also presented under both conditions of violation and non-violation of Distributive Fairness. Table 23 presents the descriptive statistics

where the dependent variable is word-of-mouth. It should be noted that no missing values were found in the data set. In addition, all values were in the expected range and provided no outliers.

**Table 23: Distributive Fairness Violation/Non-Violation and Hotel Cancellation Policies on Word-of-Mouth**

Dependent Variable: word-of-mouth

Cancelation Policy	Distributive Fairness	Mean	Std. Deviation	N
Open CXL	Non-violation	6.10	1.201	103
	Violation	4.25	1.772	100
	Total	5.19	1.767	203
48 Hours CXL	Non-violation	5.28	1.759	100
	Violation	2.02	1.679	96
	Total	3.68	2.369	196
No Refund CXL	Non-violation	3.27	1.683	96
	Violation	2.72	1.841	114
	Total	2.97	1.788	210
Total	Non-violation	4.92	1.955	299
	Violation	3.00	1.986	310
	Total	3.94	2.191	609

Note: Scale (WOM) 1=very unlikely, 7=very likely

A Levene's Test of Equality of Error Variances proved to be significant at the  $p < 0.01$  level with an F-score of 6.09. This again violates the normality of distribution of the independent variable, but any attempts to transform the data to reach a normal distribution would distort the results.

Table 24 displays the test between subject effects and describes the interaction effect between different variables.

**Table 24: Effects for Procedural Fairness Violation/Non-Violation and Hotel Cancellation Policies on Word-of-Mouth**

Dependent Variable: word-of-mouth

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	1234.879 <sup>a</sup>	5	246.976	88.443	.000	.423	442.214	1.000
Intercept	9420.331	1	9420.331	3373.448	.000	.848	3373.448	1.000
CancPol	511.366	2	255.683	91.561	.000	.233	183.122	1.000
Vial	539.680	1	539.680	193.261	.000	.243	193.261	1.000
CancPol * vial	185.117	2	92.559	33.146	.000	.099	66.291	1.000
Error	1683.873	603	2.792					
Total	12369.000	609						
Corrected Total	2918.752	608						

a. R Squared = .423 (Adjusted R Squared = .418)

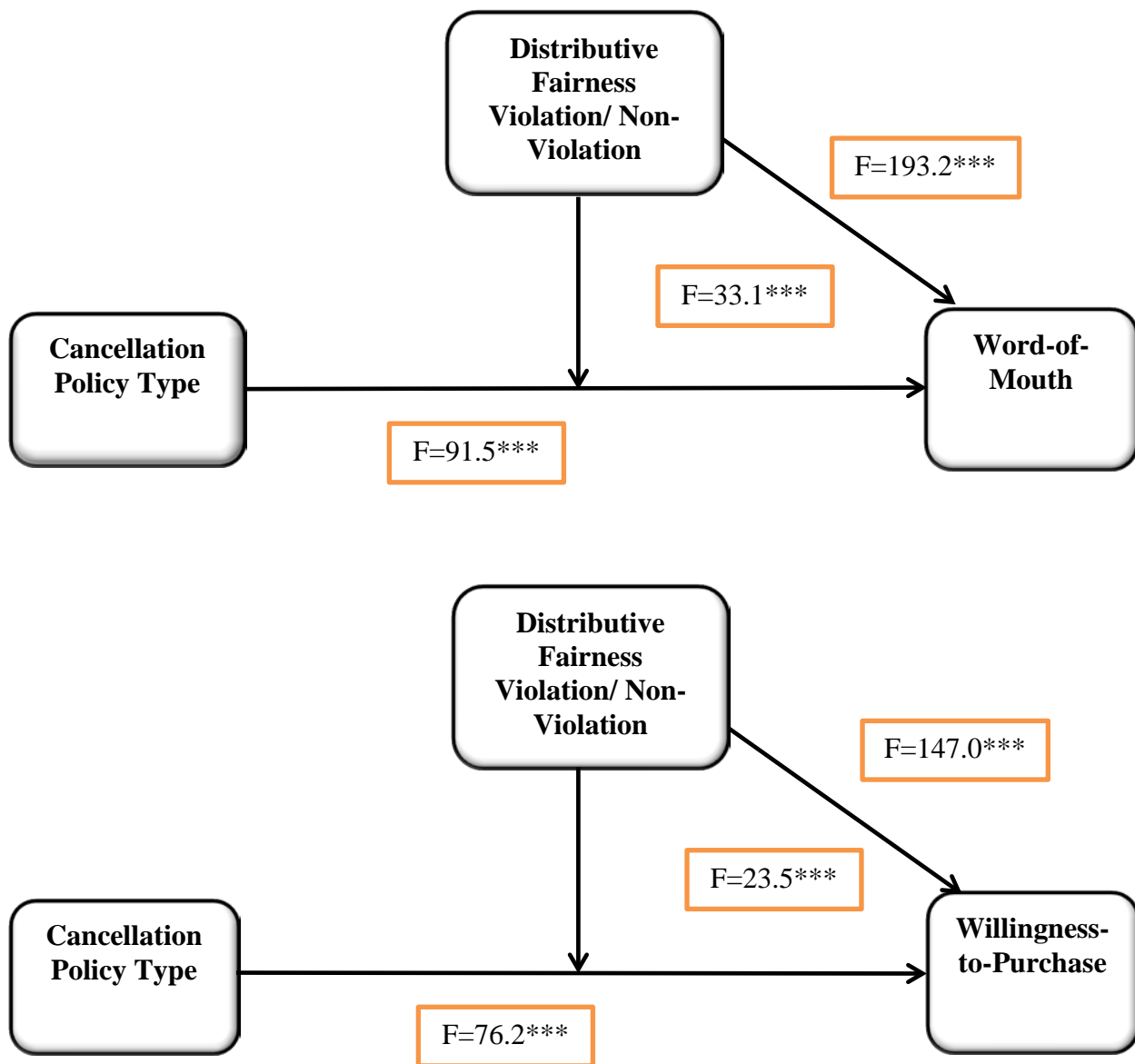
b. Computed using alpha = .05

The results again show that the type of cancellation policy significantly affects word-of-mouth at the  $p < 0.01$  level. The effect size, calculated using the partial eta squared score of .233 leads us to the conclusion that 23.3% of the variance in word-of-mouth is explained by the different cancellation policies. The violation of distributive fairness is also significant at the  $p < 0.01$  level. The effect size provided by the partial eta squared score is 24.3% of the variance in word-of-mouth. Further analysis shows that the interaction between cancellation policy type and violation/non-violation of distributive fairness has an additional effect size of 9.9%. The observed power for each is 100%, giving us the ability to say that the chances of receiving a



Type II error (false negative) is again virtually zero. Figure 13 displays the F-scores for each interaction and the effect on word-of-mouth.

**Figure 13: F-scores for Procedural Fairness Violation/Non-Violation and Hotel Cancellation Policies on Word-of-Mouth and Willingness-to-Purchase**



Note= \*sig at <.05, \*\*sig at <.01, \*\*\* sig at <.001

Table 25 presents a Tukey HSD Post Hoc Test of multiple comparisons using willingness-to-purchase as the independent variable. The Tukey HSD Post Hoc test was utilized as it is most appropriate when the samples are almost the same size.

**Table 25: Pairwise Comparisons of Various Cancellation Policies and Violation/Non-violation of Distributive Fairness and Word-of-Mouth**

Tukey HSD

(I) cell (J) cell		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Open CXL/Non-Vio	48HR CXL/Non-Vio	.82 <sup>*</sup>	.235	.007	.15	1.49
	No Ref CXL/Non-Vio	2.83 <sup>*</sup>	.237	.000	2.15	3.50
	Open CXL/Vio	1.85 <sup>*</sup>	.235	.000	1.18	2.52
	48 HR CXL/Vio	4.08 <sup>*</sup>	.237	.000	3.40	4.75
	No Ref CXL/Vio	3.38 <sup>*</sup>	.227	.000	2.73	4.03
48HR CXL/Non-Vio	Open CXL/Non-Vio	-.82 <sup>*</sup>	.235	.007	-1.49	-.15
	No Ref CXL/Non-Vio	2.01 <sup>*</sup>	.239	.000	1.33	2.69
	Open CXL/Vio	1.03 <sup>*</sup>	.236	.000	.35	1.71
	48 HR CXL/Vio	3.26 <sup>*</sup>	.239	.000	2.58	3.94
	No Ref CXL/Vio	2.56 <sup>*</sup>	.229	.000	1.91	3.22
No Ref CXL/Non-Vio	Open CXL/Non-Vio	-2.83 <sup>*</sup>	.237	.000	-3.50	-2.15
	48HR CXL/Non-Vio	-2.01 <sup>*</sup>	.239	.000	-2.69	-1.33
	Open CXL/Vio	-.98 <sup>*</sup>	.239	.001	-1.66	-.30
	48 HR CXL/Vio	1.25 <sup>*</sup>	.241	.000	.56	1.94
	No Ref CXL/Vio	.55	.231	.164	-.11	1.21
Open CXL/Vio	Open CXL/Non-Vio	-1.85 <sup>*</sup>	.235	.000	-2.52	-1.18
	48HR CXL/Non-Vio	-1.03 <sup>*</sup>	.236	.000	-1.71	-.35
	No Ref CXL/Non-Vio	.98 <sup>*</sup>	.239	.001	.30	1.66
	48 HR CXL/Vio	2.23 <sup>*</sup>	.239	.000	1.55	2.91
	No Ref CXL/Vio	1.53 <sup>*</sup>	.229	.000	.88	2.19
48 HR CXL/Vio	Open CXL/Non-Vio	-4.08 <sup>*</sup>	.237	.000	-4.75	-3.40
	48HR CXL/Non-Vio	-3.26 <sup>*</sup>	.239	.000	-3.94	-2.58
	No Ref CXL/Non-Vio	-1.25 <sup>*</sup>	.241	.000	-1.94	-.56
	Open CXL/Vio	-2.23 <sup>*</sup>	.239	.000	-2.91	-1.55
	No Ref CXL/Vio	-.70 <sup>*</sup>	.231	.032	-1.36	-.04

(I) cell                      (J) cell		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
No Ref CXL/Vio	Open CXL/Non-Vio	-3.38 <sup>*</sup>	.227	.000	-4.03	-2.73
	48HR CXL/Non-Vio	-2.56 <sup>*</sup>	.229	.000	-3.22	-1.91
	No Ref CXL/Non-Vio	-.55	.231	.164	-1.21	.11
	Open CXL/Vio	-1.53 <sup>*</sup>	.229	.000	-2.19	-.88
	48 HR CXL/Vio	.70 <sup>*</sup>	.231	.032	.04	1.36

Based on observed means.

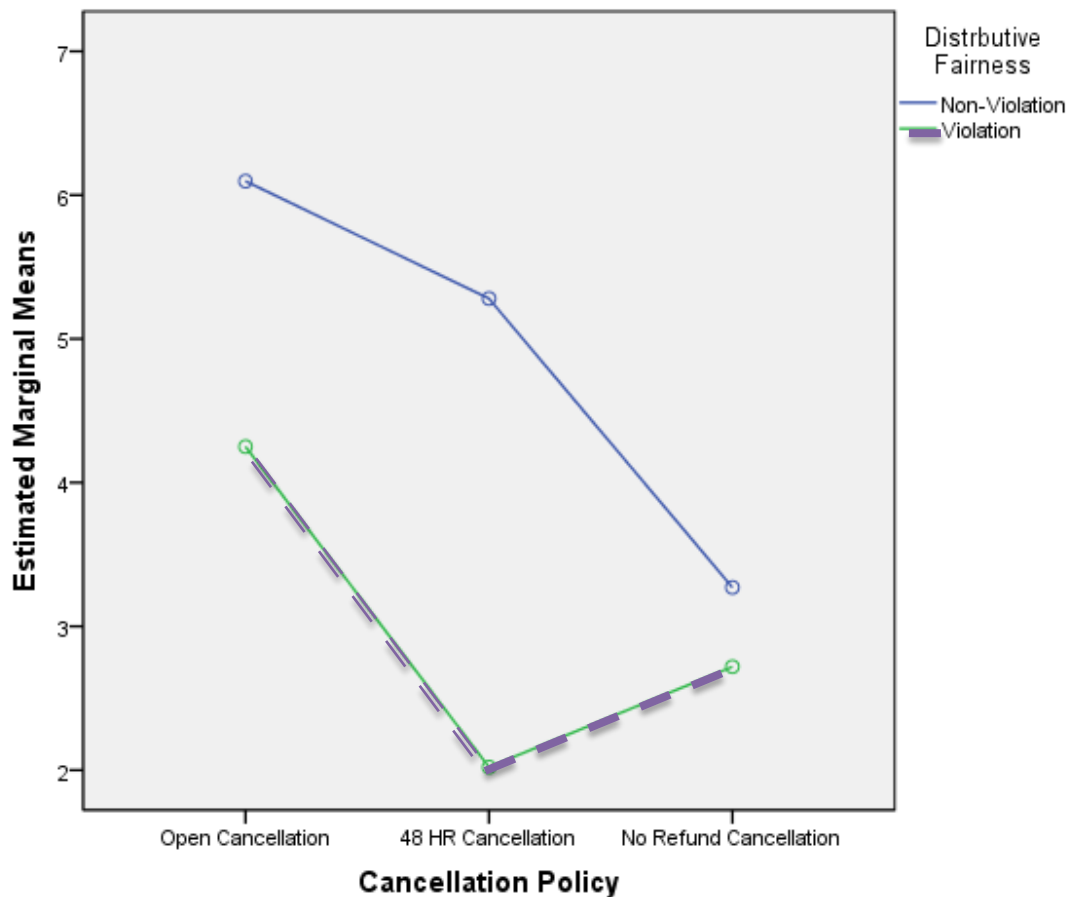
The error term is Mean Square(Error) = 2.792.

\*. The mean difference is significant at the .05 level.

In the pairwise comparison of cancellation policies and violation/non-violation of distributive fairness and word-of-mouth, all results appear significant with the same three exceptions as willingness-to-purchase.

Figure 14 displays a graphical representation of each condition with the top line representing a non-violation and the bottom line representing a violation of distributive fairness.

**Figure 14: Cancellation Policies and Word-of-Mouth**



**Data Analysis: Research Question 10, Hypotheses 10a, 10b and 10c**

Research Question 10: Does the violation of distributive fairness have a moderating effect on consumer patronage in terms of word-of-mouth?

Word-of-mouth was utilized as a measurement of consumer patronage as the dependent variable and a situation of the violation of distributive fairness was applied against the independent variable of three established hotel cancellation policies. An Analysis of Variance (ANOVA) was performed to arrive at Mean Scores for each of the three cancellation policies and

these were compared to the existing Mean Scores when the distributive fairness was not violated. It was observed that when a distributive fairness violation took place word-of-mouth decreased. A Tukey HSD Post Hoc Test of multiple comparisons was also performed to determine if these changes were significant for each hypothesis.

***H10a:*** *The violation of distributive fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and an open cancellation policy.*

In the case of an open cancellation policy, a non-violation of distributive fairness mean score of 6.10 was returned for word-of-mouth compared to a score of 4.25 for a violation. The difference is significant at  $p < 0.01$  level. This observation shows that the results support hypothesis 10a.

***H10b:*** *The violation of distributive fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and a 48 hour cancellation policy.*

In the case of a 48 hour cancellation policy, a non-violation of distributive fairness Mean Score of 5.28 was returned for word-of-mouth compared to a score of 2.02 for a violation. The difference is significant at  $p < 0.01$  level. This observation shows that the results support hypothesis 10b.

***H10c:*** *The violation of Distributive Fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and a no refund penalty cancellation policy.*

In the case of a no refund cancellation policy, a non-violation of Distributive Fairness Mean Score of 3.27 was returned for word-of-mouth compared to a mean score of 2.07 for a violation. However this observed difference is not significant. This observation shows that the

results do not support hypothesis 10c. This final observation again reinforces the previous beliefs that the 48 hour cancellation policy scores very low in terms of consumer patronage and even with applying the different moderating variables of Distributive and Procedural Fairness violations, it appears that consumers focus upon the cancellation policy as the principal factor in determining consumer patronage.

### **Summary**

This chapter provided analysis of the data and was designed around answering the 10 research questions and support hypotheses which guided the study (table 26 and 27). Descriptive statistics from 415 completed surveys collected from hotel users were detailed, data was analyzed and findings were discussed. The statistical tools utilized to analyze the data and achieve observed results were also discussed. The next and final chapter discusses in further detail the summary of the findings and the practical implications for the hotel and lodging industry. In addition, limitations of the study and suggestions for future research will also be provided.



**Table 26: Summary of Hypotheses 1-5 and Results**

	<b>Hypothesis</b>	<b>Results</b>	<b>Analysis</b>
<b>H1a</b>	The increase of a quoted price of \$20.00 in room rate compared to an expected flat price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of willingness-to-purchase	SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H1b</b>	The increase of a quoted price of \$40.00 in room rate compared to an expected flat price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of willingness-to-purchase	SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H1c</b>	The increase of a quoted price of \$60.00 in room rate compared to an expected flat price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of willingness-to-purchase	SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H2a</b>	The discount of a quoted price of \$20.00 in room rate compared to an expected flat price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of willingness-to-purchase	NOT SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H2b</b>	The discount of a quoted price of \$40.00 in room rate compared to an expected flat price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of willingness-to-purchase	SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H2c</b>	The discount of a quoted price of \$60.00 in room rate compared to an expected flat price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of willingness-to-purchase	NOT SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H3a</b>	The increase of a quoted price of \$20.00 in room rate compared to an expected flat price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of word-of-mouth	SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H3b</b>	The increase of a quoted price of \$40.00 in room rate compared to an expected flat price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of word-of-mouth	SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H3c</b>	The increase of a quoted price of \$60.00 in room rate compared to an expected flat price (Reference Price) has a significant negative effect on consumer patronage when measured in terms of word-of-mouth	SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H4a</b>	The discount of a quoted price of \$20.00 in room rate compared to an expected flat price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of word-of-mouth	NOT SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H4b</b>	The discount of a quoted price of \$40.00 in room rate compared to an expected flat price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of word-of-mouth	SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H4c</b>	The discount of a quoted price of \$60.00 in room rate compared to an expected flat price (Reference Price) has a significant positive effect on consumer patronage when measured in terms of word-of-mouth	NOT SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H5a</b>	In a condition without a violation of Procedural Fairness or Distributive Fairness, consumer patronage in terms of willingness-to-purchase is highest when an open cancellation policy is implemented when compared with 48 hour cancellation policy.	NOT SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H5b</b>	In a condition without a violation of Procedural Fairness or Distributive Fairness, consumer patronage in terms of willingness-to-purchase is highest when an open cancellation policy is implemented when compared with no refund cancellation policy	SUPPORTED	ANOVA, Tukey Post Hoc test
<b>H5c</b>	In a condition without a violation of Procedural Fairness or Distributive Fairness, consumer patronage in terms of willingness-to-purchase is highest when a 48 hour cancellation policy is implemented when compared with no refund cancellation policy	SUPPORTED	ANOVA, Tukey Post Hoc test

**Table 27: Summary of Hypotheses 6-10 and Results**

	<b>Hypothesis</b>	<b>Results</b>	<b>Analysis</b>
<b>H6a</b>	In a condition without a violation of Procedural Fairness or Distributive Fairness, consumer patronage in terms of word-of-mouth is highest when an open cancellation policy is implemented when compared with 48 hour cancelation policy	<b>NOT SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H6b</b>	In a condition without a violation of Procedural Fairness or Distributive Fairness, consumer patronage in terms of word-of-mouth is highest when an open cancellation policy is implemented when compared with no refund cancelation Policy	<b>SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H6c</b>	In a condition without a violation of Procedural Fairness or Distributive Fairness, consumer patronage in terms of word-of-mouth is highest when a 48 hour cancellation policy is implemented when compared with no refund cancelation policy	<b>SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H7a</b>	The violation of Procedural Fairness has a negative moderating effect on the Relationship between consumer patronage in terms of willingness-to-purchase and an open cancellation policy	<b>SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H7b</b>	The violation of Procedural Fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and a 48 hour cancellation policy	<b>SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H7c</b>	The violation of Procedural Fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and a no refund penalty cancellation policy	<b>NOT SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H8a</b>	The violation of Procedural Fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and an open cancellation policy	<b>SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H8b</b>	The violation of Procedural Fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and a 48 hour cancellation policy	<b>SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H8c</b>	The violation of Procedural Fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and a no refund penalty cancellation policy	<b>NOT SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H9a</b>	The violation of Distributive Fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and an open cancellation policy	<b>SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H9b</b>	The violation of Distributive Fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and a 48 hour cancellation policy	<b>SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H9c</b>	The violation of Distributive Fairness has a negative moderating effect on the relationship between consumer patronage in terms of willingness-to-purchase and a no refund penalty cancellation policy	<b>NOT SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H10a</b>	The violation of Distributive Fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and an open cancellation policy	<b>SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H10b</b>	The violation of Distributive Fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and a 48 hour cancellation policy	<b>SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>
<b>H10c</b>	The violation of Distributive Fairness has a negative moderating effect on the relationship between consumer patronage in terms of word-of-mouth and a no refund penalty cancellation policy	<b>NOT SUPPORTED</b>	<b>ANOVA, Tukey Post Hoc test</b>

## **CHAPTER FIVE: DISCUSSION AND CONCLUSIONS**

### **Introduction**

One of the goals of this research was to investigate how price increases/discounts applied to a hotel room's reference price affect consumer patronage in terms of willingness-to-purchase and word-of-mouth. Another goal of this research was to determine if and to what extent existing hotel cancellation policies affect consumer patronage in terms of willingness-to-purchase and word-of-mouth. The final goal of this research was to investigate how the violation of both Distributive and Procedural Fairness affect consumer patronage in terms of willingness-to-purchase and word-of-mouth. This chapter provides a summary of the methods utilized, the findings and the practical implications for the lodging industry. In addition, limitations of the study and suggestions for future research were included.

### **Objective**

The primary objective of this research was to better understand hotel pricing practices and consumer's perception of fairness and its effect on purchasing decisions. This review of the existing literature guided the formulation of the research questions followed by creation of a set of hypotheses which were tested using various statistical methods. The current study, in a small way adds a benefit to both the academic community and the lodging industry by contributing to the body of knowledge. A secondary objective of providing a stream of research for future studies was also established.

### **Summary and Discussion Results**

The study utilized the concepts of willingness-to-purchase and word-of-mouth as the constructs to measure how price increases/discounts, hotel cancellation policies and violations of procedural and distributive Fairness affected consumer patronage. As presented in the literature review section, Patronage is defined as a commitment to a firm in terms of return and repurchase behavior (Van Riel, Semeijn & Pauwels Rafiq, 2005; 2004). Both word-of-mouth and willingness-to-purchase are established measures of consumer patronage.

Utilizing these two constructs, a standardized questionnaire was developed and designed for travelers who utilized hotels for overnight stays. It was determined that a seven point Likert scale could best gather each respondent's quantitative responses to the questions presented. In addition, consumer's demographic data was collected. This survey instrument was crafted through various methods. Two pilot studies were conducted to determine at what price increments consumers were motivated to alter their purchasing behavior and search for a substitution. Based on the existing literature, scenarios were constructed in an effort to allow the survey respondents to determine that their procedural and distributive concepts of fairness were being violated. When completed, the survey instruments were distributed to travelers in three separate service level categories of airport hotels using an intercept method of collection. This collection took place over 6 weeks and a total of 415 useable complete surveys were collected.

### **Discussion and Implication: Hypotheses 1**

Research Question 1: Does increasing quoted room rate, negatively affect consumer patronage in terms of willingness-to-purchase?

As the study results support the three related research hypotheses, one can state that the research question was answered affirmatively. Increasing the quoted room rate does negatively affect consumer patronage in terms of willingness-to-purchase. Since conditions for the study state that the consumers must have an established reference price regarding the hotel room in question, thus no other factors were considered. An additional consideration of how much the lodging firm increases the price must be taken into account. The current study begins with a \$20 increase and continues in \$20 increments. There is a possibility that the study results could be significantly different if the increases were in smaller increments such as \$1 or \$5 amounts. Never the less, the practical implications to the lodging industry suggest that price increases over established reference prices will negatively affect the efforts to rebook previous customers. Future studies should determine how introducing additional factors to add value (i.e. offering a room upgrade or late check-out) over the existing reference price could reduce or even eliminate the negative effect on willingness-to-purchase caused by price increases.

The observed differences in both the increase and discount levels of \$20 suggest that the relationship is non-linear and that the Utility Theory does not apply. These results support Kahneman and Tversky's (1979) findings that customers treat gains (discounts) differently than losses (increases). In our study, when the treatment of price increase was applied (consumer loss) each change resulted in a significant reduction in willingness-to-purchase. Each loss was significant in lowering willingness-to-purchase. However when the treatment of discounts were

applied there was only a significant difference at the \$40 discount level in willingness-to-purchase. A comparison of the two treatments support Kahneman and Tversky's (1979) assertion that consumers are more concerned with losses (price increases) than they are with gains (price discounts).

### **Discussion and Implication: Hypotheses 2**

Research Question 2: Does discounting quoted room rate, positively affect consumer patronage in terms of willingness-to-purchase?

As the study results do not support two of the three hypotheses, one can give a qualified rejection to the above research question. Decreasing quoted room rate does positively affect consumer patronage in terms of willingness-to-purchase at certain levels of discounts. The only hypothesis that was supported was 2a, which discounted the quoted rate \$40 off of the reference price. The current results suggest that there is a range in which customers are positively motivated to increase their purchase intention when price discounts are offered. The practical implications of this finding includes the observation that minor discounts such as the study's \$20 might be considered not enough to positively influence the purchase decision. The unexpected finding in these results is that after positively affecting a willingness-to-purchase decision at the \$0 discount level, the additional discounting of \$60 does not have a significant effect. This finding suggests that past a certain point, additional discounting works against the hotel. Without additional information or studies, it is impossible to determine why this phenomena occurs, but a possible explanation may be that consumers do not trust too good of a deal. A discount that far exceeds their definition of a good deal could be a warning sign of a faulty product or poor quality

and actually motivate consumers not to purchase the lodging product without any provided justification for the steeper discount price. This observed phenomenon presents a rich opportunity for additional research on the subject. This finding is consistent with the findings of an earlier study by Parsa et.al. (2009) with the restaurant industry.

The final observation takes into account both of the above research questions and hypotheses. Utility theory suggest that in economic terms a discount of \$20 should have the opposite but equal positive effect as an increase of \$20 over the reference price. The same could be said about the discount rates of \$40 and \$60 compared to the increases of \$40 and \$60. Utility theory would suggest that the representation of the relationship would be linear. This is clearly not the observed results of the study (figure 6) and the results support Kahneman and Tversky's (1979) findings that customers treat gains (discounts) differently than losses (increases). The results of the study also support the second supposition of Kahneman and Tversky who state that losses hurt more than gains satisfy. This study supports that observation by showing that increases over a reference price (loss) has a significant negative effect where discounts for the most part (gains) do not have an equal magnitude in the positive direction for consumer patronage in term of willingness-to-purchase. This observed phenomenon also presents a rich opportunity for additional research on the subject of how consumers view price increases as a loss and discounts as a gain.

### **Discussion and Implication: Hypotheses 3**

Research Question 3: Does increasing quoted room rate, negatively affect consumer patronage in terms of word-of-mouth?

The results for consumer patronage in terms of word-of-mouth mirror exactly the results found above for willingness-to-purchase. All findings, suppositions and implications apply found above can also be applied to answer this research question.

### **Discussion and Implication: Hypotheses 4**

Research Question 4: Does discounting quoted room rate, positively affect consumer patronage in terms of word-of-mouth?

The results for consumer patronage in terms of word-of-mouth mirror exactly the results found above for willingness-to-purchase. All findings, suppositions and implications apply found above can also be applied to answer this research question. An additional observation would be how close the relationship correlation is between willingness-to-purchase and word-of-mouth exists. The Pearson Product-Moment Correlation (table 9) implies that there is linear relationship between willingness-to-purchase and word-of-mouth and as one increases by 1, the other also increases by .895. This relationship was shown to be significant at the  $p < 0.01$  level. The practical implications suggest that as one attempts to influence or affect one of these factors, the other factor is attached and affected.



### **Discussion and Implication: Hypotheses 5**

Research Question 5: Do different hotel cancellation policies have a moderating effect on consumer patronage in terms of willingness-to-purchase?

As the study results support two of the three hypotheses, one can give a qualified yes to the above research question. Applying a stricter cancellation policy does in certain conditions do significantly negatively affect consumer patronage in terms of willingness-to-purchase. The cancellation policies that are significantly affected are when comparing an open cancellation policy or a 48 hour cancellation policy against a no refund cancellation policy. However, there is no significant difference when comparing an open cancellation policy against a 48 hour cancellation policy.

The implications of these observations are considerable. Many hotel professionals believe that by applying less restrictive cancellation policies, they can positively influence the purchase decision in their favor. This may be true when converting from a no refund policy to an open cancellation policy, but appears to be untrue if moving from a 48 hour cancellation policy to an open cancellation policy. It would appear that by allowing consumers the ability to now cancel a confirmed reservation without penalty on the day of arrival does not afford any benefits in the willingness-to-purchase decision and takes on an additional liability. The additional liability in this case is holding room reservations that may or may not convert into actual check-ins all the way to the day of arrival. A 48 hour cancellation policy protects the hotel to some extent from last minute cancellations. By ensuring the majority of cancellations without penalty occur prior to 48 hours to day of arrival, the hotel has the ability to attempt to resell those rooms to last minute inquiries. An additional benefit of better accuracy in forecasting occupancy and average

daily rate is also realized with a 48 hour cancellation policy. It is this analysis that leads one to suggest to the hotel industry could eliminate the open cancellation policy and convert to a 48 hour policy as there is no apparent significant benefit in consumers' willingness-to-purchase.

A caution is warranted if a hotel is considering implementation of a no refund cancellation policy. The results of the study indicate that such an action will significantly affect a consumer's willingness-to-purchase intention. Although a benefit would be gained in increasing accuracy of forecasting and increased revenue through the collection of cancellation fees, these additional benefits may or may not outweigh the loss of business and consumers' loyalty. Consumers may forgo making a reservation because they may believe that the no refund cancellation policy may be too restrictive.

A possible interpretation of these results may be that consumers believe that a 48 hour cancellation policy is fair for both parties involved in the transaction, but a no refund cancellation policy is far too restrictive. Further studies are required for this interpretation to be validated.

### **Discussion and Implication: Hypotheses 6**

Research Question 6: Do different hotel cancellation policies have a moderating effect on consumer patronage in terms of word-of-mouth?

The results for consumer patronage in terms of word-of-mouth mirror exactly the results found above for willingness-to-purchase. All findings, suppositions and implications found above can also be applied to answer this research question. The matching results further strengthen the findings as the two separate components of consumer patronage were tested

separately. It should be noted that these results support the findings of Chen, Schwartz & Vargas (2011) who in their study observed that a 24 Hour cancellation policy was not statistically different from an Open Cancellation policy.

### **Discussion and Implication: Hypotheses 7**

Research Question 7: Does the violation of procedural fairness have a moderating effect on consumer patronage in terms of willingness-to-purchase?

The study's findings offer mixed results, supporting some and not supporting some of the hypotheses. In conditions where a hotel's cancellation policy is either an open or a 48 hours cancellation policy, a perceived violation does affect a consumer's patronage in terms of willingness-to-purchase. In the conditions where the cancellation policy is a no refund policy, introducing a procedural fairness does not significantly affect customer patronage in terms of willingness-to-purchase. A possible explanation is that consumers view the no refund policy enough of a deterrent to completing a reservation/purchase, that before the additional factor of the procedural fairness violation occurs, they have already made up their mind not to proceed. If this is the explanation for the non-significance, it strongly indicates that consumers may not view the no refund cancellation policy as a desirable or a fair policy. The implications for the Lodging Industry are such that no refund policies are so unacceptable to consumers that they may not even consider contacting the property to begin the booking process if it is known that a no refund cancelation policy is in place. The results provide an opportunity to further explore why consumers may find a violation of procedural fairness and a no refund cancellation policy both

unacceptable in terms of willingness-to-purchase. Further research could help to determine what consumers consider to be a fair and equitable cancellation policy.

### **Discussion and Implication: Hypotheses 8**

Research Question 8: Does the violation of procedural fairness have a moderating effect on consumer patronage in terms of word-of-mouth?

The results for consumer patronage in terms of word-of-mouth mirror exactly the results found above for willingness-to-purchase. All findings, suppositions and implications found above can also be applied to answer this research question. The matching results further strengthen the findings as two separate components of consumer patronage were tested separately.

### **Discussion and Implication: Hypotheses 9**

Research Question 9: Does the violation of distributive fairness have a moderating effect on consumer patronage in terms of willingness-to-purchase?

The study's findings offer mixed results, supporting some and not supporting some of the hypotheses. In conditions where the hotel's cancellation policy is either an open or 48 hours policy, a perceived violation of distributive fairness does affect a consumer's patronage in terms of willingness-to-purchase. In the conditions where the cancellation policy is a no refund policy, introducing a distributive fairness violation does not significantly affect customer patronage in terms of willingness-to-purchase. Much like the procedural fairness violation results, the possible explanation is that consumers again view the no refund policy as enough of a deterrent

to complete a reservation/purchase that before the additional factor of the distributive fairness violation occurs; they have already made up their mind not to proceed. This again calls into question the consumers acceptance of a no refund cancellation policy and the results indicate that they could place a similar value of the cancellation policy as they do with a perceived violation of distributive fairness. The implications for the Lodging Industry are such that the results again indicate that they should consider crafting a clear, consistent cancellation policy that consumers would be willing to accept.

### **Discussion and Implication: Hypotheses 10**

Research Question 10: Does the violation of distributive fairness have a moderating effect on consumer patronage in terms of word-of-mouth?

The results for consumer patronage in terms of word-of-mouth mirror exactly the results found above for willingness-to-purchase. All findings, suppositions and implications found above can also be applied to answer this research question. The matching results further strengthen the findings as two separate components of consumer patronage were tested separately.

### **Suggestions for Future Research**

Possible future research could investigate if more information was provided to consumers about the reservation process and how hotels lose revenue from last minute cancellations, could this affect the consumer's opinions regarding the strict no refund policy. Another area of

research that could be extended from the results of this study would be to determine what consumers would consider to be a fair and equitable cancellation policy. A possible interpretation of the results could indicate that a 48 hour cancellation policy is acceptable to consumers, but may be considered unfair and too liberal in favor of the consumer from the hotel industry perspective. This liberal policy could lead to abuse as consumers continue to bargain hunt even after they have secured a confirmed reservation. On the other hand, the next step would be to institute a no refund cancellation policy that protects the hotel from bargain hunter cancellations, but is considered to be unpopular by consumers and would interfere with a consumers' patronage.

Further studies could attempt to isolate an acceptable option that could help both reduce bargain hunter cancellations 48 hours prior to check-in and at the same time be considered an acceptable fair cancellation policy to consumers. The study could review the effect of establishing a small cancellation fee that is significantly less than the one night's room rate charged in a no refund cancellation. This smaller fee cancellation policy could follow the lead of the retail industry which effectively instituted "restocking fees" as a deterrent to the abuse of non-legitimate customer returns. The results could determine at what amount, either as a flat fee or a percentage of the room rate, does a cancellation fee deter the majority of consumers from bargain hunter cancellation behavior and at the same time does not deter them from completing a hotel reservation.

An alternative line of research could perform studies to explore if extending the no penalty cancellation window for consumers could be instituted without a significant effect on consumer patronage. If the hotel industry could extend this window to 72 hours or 96 hours,

benefits could be realized in terms of being able to resell rooms to offset cancellations and at the same time improve forecasting.

### **Limitations**

Although there has been much research concerning the perceived fairness of revenue management practices in the hotel industry, there has been very limited research on hotel cancellation policies. In addition, there has also been much research performed about pricing, but very little of it has been focused on the hotel reservation cancellation policies. By focusing this study on those limited areas, it is believed that a contribution can be made to the existing literature.

It should be realized that as with all studies, limitations exist and should be presented in an effort to determine the validity of the findings. It is believed that although a strong effort was made to collect a representative sampling of consumers that utilize hotels, the sample size limits the generalizability of these findings to the entire consumer population that travels and utilizes hotels. A further limitation to generalizability is the collection of surveys at only three hotel type categories. The extreme ends of the hotel category types, luxury and budget, were not represented in this study. A further limitation is the single destination of Orlando as the survey intercept collection site. The results may not apply to other cities or destinations as Orlando is unique in its draw of tourist and leisure travelers and could provide an overrepresentation of such.

The length and detailed scenarios described required several minutes of reading and comprehension on the participants part. This could induce questionnaire fatigue and produce less than genuine responses. Although most participants indicated that the study was not difficult to

complete, it is possible that several may have not thoroughly read the questions before responding and simply responded with the most convenient or random answer. The limitation of the use of the seven point Likert scale was also discussed and results can be skewed towards opposite ends of the scale, which provides and less than normal distribution.

Although every effort was made to construct scenarios that provided for situations of procedural and distributive Fairness violations on the survey instrument, these are subjective concepts and difficult to describe in the limited amount of text allowed in a written survey. The results are that some the participants may not perceive the violation and as a result render the treatment as ineffective. The opposite may also occur in that some participants may interpret the scenario as more than what was intended and answer accordingly.

### **Summary**

The chapter presented detailed summary of the findings and the practical implications for the hotel and lodging industry. Limitations of this study and suggestions for future research were also provided. The results provide a further step into understanding what are the factors in both pricing and cancellation policies that affect the concept of consumer patronage. This study also provides suggestions for further research into these areas.

In conclusion, this study was able to support much of the existing literature on prospect theory with regards to the lodging industry. Using rate increases and discounts compared against an established reference price, we were able to observe the effects on willingness-to-purchase and word-of-mouth as measures of consumer patronage as the dependent variable. The results of this study support Kahneman and Tversky's (1979) assertion that consumers weigh losses much



heavier than gains. This study produced results that are similar in that consumers scored rate increases (losses) with more weight than they did for rate discounts (gains).

In addition, this study observed the effect how consumers rated three different hotel cancellation policies in terms of consumer patronage as the dependent variable. The results provided a ranking order where an Open cancellation policy and 48 Hour cancellation policy were statistically different from a No Refund cancellation policy. However it was observed that there was no statistical difference between an Open cancellation policy and a 48 Hour cancellation policy in both willingness-to-purchase and word-of-mouth.

An additional treatment of distributive fairness and procedural fairness violations were introduced to each of the three cancellation policies to determine if these would have a moderating effect on the dependent variable of consumer patronage. It was observed that both the distributive and procedural fairness violations had a significant moderating effect on the Open cancellation policy and the 48 Hour cancellation policy, but not on the No Refund cancellation policy.

## **APPENDIX A: OPTIONS DEFINITION**

If the standard reservation could be cancelled anytime (up to the last minute) you may view it as a European call option. In fact, it is a Free Option that the hotel provides the customer - the option to "buy" the hotel room "at a fixed time" in the future, for a "fixed price". The customer may or may not exercise the option depending on his "valuation" of the room on the "maturity" date (move-in date).

Of course, the "valuation" will depend on whether the customer will be in the city on the maturity date, and whether at the time of move-in if the customer finds alternate rooms in the "spot" market that offer a better deal.

Of course, if you cancel within 48 hours and you incur a 100% penalty, then (at the 48hr point) it becomes a futures contract.

If the penalty is less than 100% then it becomes a costly option. for example with a 25% penalty, you effectively pay 25% for the option to buy the room for an additional 75%, but it is complicated because if the reservation is not transferable then you have an option that is not tradable - so the value of the option goes from 25 to zero the instant you buy it.

Hope this is helpful

DR. R. "Pradipkumar Ramanlal" [pramanlal@cfl.rr.com](mailto:pramanlal@cfl.rr.com)

JAN @28 2010

**APPENDIX B: SURVEY INSTRUMENT #1- PERSONAL FAIRNESS NON-VIOLATION & DISTRIBUTIVE FAIRNESS VIOLATION**



**The Relationship between Perceived Personal Fairness, Social Fairness,  
Hotel Cancellation Policies and Consumer Patronage**

**Explanation of Research**

**You have been asked to take part in this research study because you are a traveler.**

**Whether you take part is up to you.**

**What you should know about a research study:**

- This survey is intended to explore consumer's attitudes towards hotel reservation policies.
- This study will be used to provide practical information so that hotels can improve the services they provide to travelers.
- We expect that it will take you less than 5 minutes to complete this survey.
- This study is anonymous. That means that no one, not even members of the research team, will know that the information you gave came from you.
- Participation in this survey is voluntary and you may stop at any time.
- You must be 18 years of age or older to be included in the research study.

**Thank You for Your Participation!!!!**

**Study contact for questions about the study or to report a problem:**

Scott Smith, Faculty  
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University of Central Florida  
9907 Universal Blvd  
Orlando FL, 32809  
(407) 823-4447  
scott.smith@[ucf.edu](mailto:scott.smith@ucf.edu)

or

Dr. H.G. Parsa-Faculty Supervisor  
Rosen College of Hospitality Management  
University of Central Florida,  
9907 Universal Blvd, Orlando FL, 32809  
(407) 903-8048  
hparsa@ucf.edu

**IRB contact about your rights in the study or to report a complaint:** Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

## Consumer Survey Instrument

1. Someone is booking a hotel room. In the past they have paid what they consider to be a fair price for the hotel room. They are attempting to book a room at the same hotel under the same circumstances, and the room rate is the same as they paid for their last visit. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

2. In the above situation, if the rate has increased by \$20.00 over the past visit. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

What is the likelihood that this person makes the reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

3. In the above situation, if the rate has increased by \$40.00. On a scale of 1-7 where 1 = Very Unlikely and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

4. In the above situation, if the rate has increased by \$60.00. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

**A**

5. In the above situation, if the rate has decreased by **\$20.00**. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

6. In the above situation, if the rate has decreased by **\$40.00**. On a scale of 1-7 where 1 = Very Unlikely and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

7. In the above situation, if the rate has decreased by **\$60.00**. On a scale of 1-7 where 1 = Very Unlikely and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

8. A traveler made a reservation at a hotel. The hotel's advertised cancellation policy is that they will not charge for a cancellation. The traveler cancelled the reservation the same day and was charged full price as a cancellation fee. When asked why they were being charged for a cancellation, the traveler was told that this no penalty cancellation policy only applies to other types of reservations and not theirs:

In the future, what is the likelihood of that person making a reservation at this hotel?  
**(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

A

9. A traveler made a reservation at a hotel. The hotel's advertised cancellation policy is that they will charge the full price for a cancellation within 48 hours of check-in. The traveler cancelled the reservation the same day and was not charged a cancellation fee:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

10. A traveler made a reservation at a hotel. The hotel's advertised cancellation policy is that they will charge for a cancellation. The traveler cancelled the reservation the same day and was charged a full price as a cancellation fee. The traveler later learned that the hotel did not charge someone else for a similar cancellation:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

11. What is the primary reason for your travel? **(circle one)**

1) Business                      OR                      2) Leisure

12. Trips are defined as traveling 50 miles or more and staying one or more nights away from home. How many trips approximately did you take in the calendar year 2010 (estimate it) for

\_\_\_\_\_ **Business**                      \_\_\_\_\_ **Leisure**

13. What is your age group? **(circle one)**

1) Below 21      2) 21-30                      3) 31-40                      4) 41-50

5) 51-60                      6) 61-70                      7) 71 or above

14. What is your gender? **(circle one)**

1) Male    2 )Female

15. What is highest level of your education? **(circle one)**

1) High School Diploma    2) Vocational/Trade School Diploma

3) Two Year College Diploma (AA etc) 4) Four Year College Degree (BS, BA etc.)

5) Master's Degree (MS, MA, MFA etc.)                      6) Professional Degree (PhD, MD, LLM etc.)



16) What is your annual gross household income? **(circle one)**

1) Under \$30,000

2) \$30,001 - \$54,000

3) \$55,000 - \$74,999

4) \$75,000 - \$99,999

5) \$100,000 - \$149,999

6) \$150,000-\$199,999

7) \$200,000 and over

17) Indicate your current marital status? **(circle one)**

1) Single

2) Married with No Children

3) Married with Children

4) Separated

5) Widowed

18) Are you being reimbursed or is a company paying the lodging expenses for this trip? **(circle one)**

1) Yes

2) No

**THANK YOU!!!!!!!**

**Please return the completed questionnaire to the research assistant or mail to:**

**Rosen College of Hospitality Management  
University of Central Florida  
9907 Universal Blvd  
Orlando FL, 32809**

**Attn: Scott Smith, Faculty**

**APPENDIX C: SURVEY INSTRUMENT #2- PERSONAL FAIRNESS NON-VIOLATION AND PROCEDURAL FAIRNESS VIOLATION**



## **The Relationship between Perceived Personal Fairness, Social Fairness, Hotel Cancellation Policies and Consumer Patronage**

### **Explanation of Research**

**You have been asked to take part in this research study because you are a traveler.**

**Whether you take part is up to you.**

**What you should know about a research study:**

- This survey is intended to explore consumer's attitudes towards hotel reservation policies.
- This study will be used to provide practical information so that hotels can improve the services they provide to travelers.
- We expect that it will take you less than 5 minutes to complete this survey.
- This study is anonymous. That means that no one, not even members of the research team, will know that the information you gave came from you.
- Participation in this survey is voluntary and you may stop at any time.
- You must be 18 years of age or older to be included in the research study.

**Thank You for Your Participation!!!!**

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Orlando FL, 32809  
(407) 823-4447  
scott.smith@[ucf.edu](mailto:scott.smith@ucf.edu)

or

Dr. H.G. Parsa-Faculty Supervisor  
Rosen College of Hospitality Management  
University of Central Florida,  
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hparsa@ucf.edu

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What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

- 2) In the above situation, if the rate has increased by **\$20.00** over the past visit. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

What is the likelihood that this person makes the reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

- 3) In the above situation, if the rate has increased by **\$40.00**. On a scale of 1-7 where 1 = Very Unlikely and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

- 4) In the above situation, if the rate has increased by **\$60.00**. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

**B**

- 5) In the above situation, if the rate has decreased by \$20.00. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

- 6) In the above situation, if the rate has decreased by \$40.00. On a scale of 1-7 where 1 = Very Unlikely and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

- 7) In the above situation, if the rate has decreased by \$60.00. On a scale of 1-7 where 1 = Very Unlikely and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

- 8) A traveler made a reservation at a hotel. The hotel's advertised cancellation policy is that they will charge the full price for a cancellation within 48 hours of check-in. The traveler cancelled the reservation the same day and was charged full price as a cancellation fee. When asked why they were being charged for a cancellation, the traveler was told that this 48 hour cancellation policy only applies to other types of reservations and not theirs:

In the future, what is the likelihood of that person making a reservation at this hotel?  
**(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

- 9) A traveler made a reservation at a hotel. The hotel's advertised cancellation policy is that they will charge the full price for a cancellation. The traveler cancelled the reservation the same day and was charged full price for a cancellation fee.

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

- 10) A traveler made a reservation at a hotel. The hotel's advertised cancellation policy is that they will not charge for a cancellation. The traveler cancelled the reservation the same day and was not charged a cancellation fee. The traveler later learned that the hotel did not charge someone else for a similar cancellation:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

- 11) What is the primary reason for your travel? **(circle one)**

1) Business                      OR                      2) Leisure

- 12) Trips are defined as traveling 50 miles or more and staying one or more nights away from home. How many trips approximately did you take in the calendar year 2010 (estimate it) for

\_\_\_\_\_ **Business**                      \_\_\_\_\_ **Leisure**

- 13) What is your age group? **(circle one)**

1) Below 21      2) 21-30      3) 31-40      4) 41-50  
5) 51-60      6) 61-70      7) 71 or above

- 14) What is your gender? **(circle one)**

1) Male                                      2) Female

- 15) What is highest level of your education? **(circle one)**

1) High School Diploma                      2) Vocational/Trade School Diploma  
3) Two Year College Diploma (AA etc) 4) Four Year College Degree (BS, BA etc.)  
5) Master's Degree (MS, MA, MFA etc.)                      6) Professional Degree (PhD, MD, LLM etc.)

**B**

16) What is your annual gross household income? **(circle one)**

1) Under \$30,000

2) \$30,001 - \$54,000

3) \$55,000 - \$74,999

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5) \$100,000 - \$149,999

6) \$150,000-\$199,999

7) \$200,000 and over

17) Indicate your current marital status? **(circle one)**

1) Single

2) Married with No Children

3) Married with Children

4) Separated

5) Widowed

18) Are you being reimbursed or is a company paying the lodging expenses for this trip? **(circle one)**

1) Yes

2) No

**THANK YOU!!!!!!!**

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**Orlando FL, 32809**

**Attn: Scott Smith, Faculty**

**APPENDIX D: SURVEY INSTRUMENT #3-PERSONAL FAIRNESS  
VIOLATION 7 DISTRIBUTIVE FAIRNESS VIOLATION**





**The Relationship between Perceived Personal Fairness, Social Fairness,  
Hotel Cancellation Policies and Consumer Patronage**  
**Explanation of Research**

**You have been asked to take part in this research study because you are a traveler.**

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**What you should know about a research study:**

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- We expect that it will take you less than 5 minutes to complete this survey.
- This study is anonymous. That means that no one, not even members of the research team, will know that the information you gave came from you.
- Participation in this survey is voluntary and you may stop at any time.
- You must be 18 years of age or older to be included in the research study.

**Thank You for Your Participation!!!!**

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University of Central Florida,  
9907 Universal Blvd, Orlando FL, 32809  
(407) 903-8048  
hparsa@ucf.edu

**IRB contact about your rights in the study or to report a complaint:** Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

## Consumer Survey Instrument

- 1) Someone is booking a hotel room. In the past they have paid what they consider to be a fair price for the hotel room. They are attempting to book a room at the same hotel under the same circumstances, and the room rate is the same as they paid for their last visit. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

- 2) In the above situation, if the rate has increased by **\$20.00** over the past visit. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

What is the likelihood that this person makes the reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

- 3) In the above situation, if the rate has increased by **\$40.00**. On a scale of 1-7 where 1 = Very Unlikely and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

- 4) In the above situation, if the rate has increased by **\$60.00**. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

C

- 5) In the above situation, if the rate has decreased by \$20.00. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

- 6) In the above situation, if the rate has decreased by \$40.00. On a scale of 1-7 where 1 = Very Unlikely and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

- 7) In the above situation, if the rate has decreased by \$60.00. On a scale of 1-7 where 1 = Very Unlikely and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

- 8) A traveler made a reservation at a hotel which advertises a no-refund cancellation policy. The traveler cancelled the reservation the same day and was charged a full price for one night as a cancellation fee. This person later found out that the hotel was all filled up for the same night that they cancelled and it is assumed that hotel resold their room at full price:

In the future, what is the likelihood of that person making a reservation at this hotel?  
**(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

C

- 9) A traveler made a reservation at a hotel. The hotel's advertised cancellation policy is that they will not charge for a cancellation. The traveler cancelled the reservation and received a refund for the full price after 90 days. The traveler later learned that the hotel another guest received his/her refund quickly within 30 days:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

- 10) A traveler made a reservation at a hotel. The hotel's advertised cancellation policy is that they will charge the full price for a cancellation within 48 hours of check-in. The traveler cancelled the reservation the same day and was not charged a cancellation fee. The traveler later learned that the hotel did not charge someone else for a similar cancellation:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

- 11) What is the primary reason for your travel? **(circle one)**

1) Business                      OR                      2) Leisure

- 12) Trips are defined as traveling 50 miles or more and staying one or more nights away from home. How many trips approximately did you take in the calendar year 2010 (estimate it) for

\_\_\_\_\_ **Business**                      \_\_\_\_\_ **Leisure**

- 13) What is your age group? **(circle one)**

1) Below 21      2) 21-30                      3) 31-40                      4) 41-50  
5) 51-60                      6) 61-70                      7) 71 or above

- 14) What is your gender? **(circle one)**

1) Male    2) Female

- 15) What is highest level of your education? **(circle one)**

1) High School Diploma                      2) Vocational/Trade School Diploma  
3) Two Year College Diploma (AA etc) 4) Four Year College Degree (BS, BA etc.)  
5) Master's Degree (MS, MA, MFA etc.)                      6) Professional Degree (PhD, MD, LLM etc.)

**C**

16) What is your annual gross household income? **(circle one)**

1) Under \$30,000

2) \$30,001 - \$54,000

3) \$55,000 - \$74,999

4) \$75,000 - \$99,999

5) \$100,000 - \$149,999

6) \$150,000-\$199,999

7) \$200,000 and over

17) Indicate your current marital status? **(circle one)**

1) Single

2) Married with No Children

3) Married with Children

4) Separated

5) Widowed

18) Are you being reimbursed or is a company paying the lodging expenses for this trip? **(circle one)**

1) Yes

2) No

**THANK YOU!!!!!!!**

**Please return the completed questionnaire to the research assistant or mail to:**

**Rosen College of Hospitality Management  
University of Central Florida  
9907 Universal Blvd  
Orlando FL, 32809**

**Attn: Scott Smith, Faculty**

**APPENDIX E: SURVEY INSTRUMENT #4- PERSONAL FAIRNESS  
VIOLATION 7 PROCEDURAL FAIRNESS VIOLATION**



**The Relationship between Perceived Personal Fairness, Social Fairness,  
Hotel Cancellation Policies and Consumer Patronage**  
**Explanation of Research**

**You have been asked to take part in this research study because you are a traveler.**

**Whether you take part is up to you.**

**What you should know about a research study:**

- This survey is intended to explore consumer's attitudes towards hotel reservation policies.
- This study will be used to provide practical information so that hotels can improve the services they provide to travelers.
- We expect that it will take you less than 5 minutes to complete this survey.
- This study is anonymous. That means that no one, not even members of the research team, will know that the information you gave came from you.
- Participation in this survey is voluntary and you may stop at any time.
- You must be 18 years of age or older to be included in the research study.

**Thank You for Your Participation!!!!**

**Study contact for questions about the study or to report a problem:**

Scott Smith, Faculty  
Rosen College of Hospitality Management  
University of Central Florida  
9907 Universal Blvd  
Orlando FL, 32809  
(407) 823-4447  
scott.smith@[ucf.edu](mailto:scott.smith@ucf.edu)

or

Dr. H.G. Parsa-Faculty Supervisor  
Rosen College of Hospitality Management  
University of Central Florida,  
9907 Universal Blvd, Orlando FL, 32809  
(407) 903-8048  
hparsa@ucf.edu

**IRB contact about your rights in the study or to report a complaint:** Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

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What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

- 2) In the above situation, if the rate has increased by **\$20.00** over the past visit. On a scale of 1-7 where 1 = Very Unlikely; and 7 = Very Likely:

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**D**



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How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

- 6) In the above situation, if the rate has decreased by \$40.00. On a scale of 1-7 where 1 = Very Unlikely and 7 = Very Likely:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1       2       3       4       5       6       7   Very Likely**

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In the future, what is the likelihood of that person making a reservation at this hotel?  
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**D**

- 9) A traveler made a reservation at a hotel. The hotel's advertised cancellation policy is that they will charge the full price for a cancellation within 48 hours of check-in. The traveler cancelled the reservation the day before check-in and was charged a full price as a cancellation fee. The traveler later learned that the hotel did not charge someone else for a similar cancellation:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

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- 10) A traveler made a reservation at a hotel. The hotel's advertised cancellation policy is that they will charge the full price for a cancellation. The traveler cancelled the reservation the same day and was charged a cancellation fee. The traveler later learned that the hotel also charged someone else for a similar cancellation:

What is the likelihood of that person making this hotel reservation? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

How likely that this person will speak positively about the hotel to friends and family? **(Please circle one)**

**Very Unlikely   1   2   3   4   5   6   7   Very Likely**

- 11) What is the primary reason for your travel? **(circle one)**

1) Business                      OR                      2) Leisure

- 12) Trips are defined as traveling 50 miles or more and staying one or more nights away from home. How many trips approximately did you take in the calendar year 2010 (estimate it) for

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16) What is your annual gross household income? **(circle one)**

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1) Yes

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**THANK YOU!!!!!!!!!!**

**Please return the completed questionnaire to the research assistant or mail to:**

**Rosen College of Hospitality Management**

**University of Central Florida**

**9907 Universal Blvd**

**Orlando FL, 32809**

**Attn: Scott Smith, Faculty**

## **APPENDIX F: INSTITUTIONAL REVIEW BOARD LETTER**



University of Central Florida Institutional Review Board  
Office of Research & Commercialization  
12201 Research Parkway, Suite 501  
Orlando, Florida 32826-3246  
Telephone: 407-823-2901 or 407-882-2276  
[www.research.ucf.edu/compliance/irb.html](http://www.research.ucf.edu/compliance/irb.html)

## Approval of Exempt Human Research

From: **UCF Institutional Review Board #1  
FWA00000351, IRB00001138**

To: **Scott Jackson Smith**

Date: **November 16, 2011**

Dear Researcher:

On 11/16/2011, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review:	Exempt Determination
Project Title:	The Relationship between Perceived Personal Fairness, Social Fairness, Hotel Cancellation Policies and Consumer Patronage
Investigator:	Scott Jackson Smith
IRB Number:	SBE-11-07890
Funding Agency:	None

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Janice Turchin on 11/16/2011 12:40:35 PM EST

A handwritten signature in cursive script that reads "Janice Turchin".

IRB Coordinator

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