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CONSUMERS' PERCEIVED PRICE FAIRNESS AND UNFAIRNESS TOWARD PRICE INCREASES DURING HEDONIC VS. UTILITARIAN SITUATIONS

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CONSUMERS' PERCEIVED PRICE FAIRNESS AND UNFAIRNESS TOWARD PRICE INCREASES DURING HEDONIC VS. UTILITARIAN SITUATIONS

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I dedicate this dissertation to the Lord.

I also dedicate this to my parents who have given me unwavering support throughout my life. Their continual support of everything I do has allowed me to find my own path and pursue my passions.

Special dedication to my adorable son, Taewon for the understanding and encouragement he provided during all these years of study. I love you.

Have I not commanded you? Be strong and of good courage; do not be afraid, nor be dismayed, for the LORD your GOD will be with you wherever you go. Joshua 1:9

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ABSTRACT

Kang, Eunjoo. Ph.D., Purdue University, December 2016. Consumers' Responses to Hotels' Dynamic Pricing During Hedonic vs. Utilitarian Events. Major Professor: Sandra Sydnor.

This dissertation consists of three essays on the topic of consumers' response to hotel room rates increases due to external events (hedonic and utilitarian situations). External events such as sporting games, local festivals, or weather-related events (e.g., floods, snowstorms) frame consumers' motivation to stay in a hotel room (hedonic vs. utilitarian motivations), increasing hotel room demand and resulting in higher room rates. The dynamic changes of hotel room rates during the high demand periods may cause consumers to perceive high room rates as unfair, restricting their intentions or enhancing their desires to book a hotel room before room rates increase even higher. Thus, it is vital to understand the impact of external event characteristics as well as the level of involvement on consumers' responses to hotel room rate increases. These three papers examine the contextual impact of external events and individual level of involvement on the relationship among price increases, consumers' perceived fairness and unfairness and their booking intentions.

The first paper measures perceived price fairness and perceived price unfairness as separate constructs using the two-step measurement: 1) a binary scale to identify the direction (fair or unfair), and 2) an ordinal scale to capture the magnitude of perceived

fairness/unfairness separately. It then examines the effect of consumers' trip motivation (hedonic vs. utilitarian) on their perceived price fairness/unfairness and their booking intentions in dynamic hotel room pricing. The results demonstrate that the magnitude of price increases and trip motivations (hedonic vs utilitarian motivation) influence the level of perceived unfairness, but not perceived fairness. The findings also empirically verify the concept of separability of perceived fairness and unfairness, calling into question whether a continuum scale of perceived fairness-unfairness (very unfair – very fair) is appropriate to use in measuring perceived price fairness.

The second study proposes bivariate measurements of perceived fairness and unfairness to verify the conceptual and empirical independence of perceived fairness and perceived unfairness. The results reveal that consumers can have ambivalent perceptions of fairness and unfairness, and may not necessarily see something as either fair or unfair. Unlike the results of the first study, these results reveal that the magnitude of price increases and external situation (hedonic vs. utilitarian situations) influence both perceived fairness and unfairness. However, the results indicate fairness perceptions are the more powerful drivers of booking intentions than unfair perceptions.

The third study examines the moderating role consumer involvement plays in the relationship among price increases, perceived fairness and unfairness, and hotel booking intentions. The results show that low-involved consumers are more sensitive to price changes in perceptions of price fairness and their fairness perceptions have a stronger effect on booking intentions than high-involved ones. For high-involvement consumers, the relationship between unfairness perceptions and booking intentions is stronger than it

is for low-involved consumers. The findings show that the moderating effect of involvement is significant only in the utilitarian situation.

The three studies highlight the distinction between consumers' perceived price fairness and perceived unfairness. Consumers may have both fair and unfair perceptions at the same time. The results show that consumers' perceived fairness is the more powerful driver in booking intentions. If consumers have somewhat ambivalent perceptions, fairness perceptions influence booking intentions. Therefore, hotel management might consider promoting perceived fairness rather than ignoring perceived unfairness because it exerts a more powerful influencer on booking intentions.

CHAPTER 1. INTRODUCTION

This dissertation has been written in a non-traditional format. In this format, chapter one offers an overall introduction to the dissertation. This is followed by three essays in chapter two, three, and four. These three essays will be submitted to a research journal for publication. Finally, the last chapter discusses the overall results and conclusions, as well as the findings relevant to the hypotheses tested to guide this study. This non-traditional format then follows with a comprehensive list of all references used in chapters one through five and any relevant appendix materials.

1.1 Introduction

Hotel revenue management (hereafter RM) refers to the successful management technique of "allocating the right type of capacity to the right kind of customer at the optimal price so as to maximize revenue" (Kimes, 1989, p. 15). Based on demand forecast, hotels adjust room rates, increasing rates during times of high demand to control actual demand and decreasing rates during times of low demand to promote (attract) demand. The core of RM is this demand-driven pricing which violates the principle of fair price, also known as "Dual Entitlement" (Kahneman, Knetsch, & Thaler, 1986). Dual entitlement delineates that any price increases to take advantage of surplus demand is considered unfair (Kahneman et al., 1986). Based on the consensus on this dual

entitlement, consumers' price fairness perceptions have functioned as a constraint on hotels' decisions to increases prices and restricted the their capability to maximize revenue.

However, RM's dynamic pricing has become an important strategic technique in spite of the inherent price fairness perceptions of consumers. As hotel consumers become exposed to and familiar with dynamic pricing, the expectation is that consumers conventionally might expect hotel room rates to fluctuate according to changes in demand. It has now become customary for hotels to set higher room rates during weekend (in resort areas) and peak seasons, and lower room rates on weekdays and in off seasons. Further, we often observe that hotels increase room rates even higher than normal peak seasons during special events (e.g., Olympics, Super Bowl, Film Festivals, etc.) and during or after a severe weather or accident (e.g., airport closure due to the Asiana Airline crash in San Francisco airport in 2013). However, it is unclear whether or how much consumers perceive such price increases as fair.

Previous literature suggests that the core factors of RM's dynamic pricing that stimulate consumers' price unfairness perceptions may be *the magnitude of price increases and external events that increase demand*. This study uses a scenario experiment to manipulate the most plausible situations in the hotel industry, that is, price increases in the case of a sporting event and a severe weather event. These situations represent hedonic and utilitarian situations that give consumers a hedonic or utilitarian motivation to book a hotel. For example, consumers in a sporting event situation would book a hotel to enjoy a hedonic value (watching a sports game), while consumers in a utilitarian event would book a hotel for the utility of a hotel stay. This dissertation aims to

examine the consumers' perceived price fairness and behavioral responses toward price increases caused by a hedonic vs. utilitarian event.

The most important concern of this dissertation is to resolve the limitations in the measurement of perceived price fairness. Many studies have addressed the conceptual difference between perceived fairness and unfairness (Xia, Monroe, & Cox, 2004). The continuum bipolar scale(s) (very unfair – very fair) or unidirectional Likert scale(s) (strongly disagree- strongly agree) which have been predominately used to measure perceived price fairness cannot fully reflect such conceptual difference. In addition, on a bipolar scale, the meaning of the neutral point varies depending on different respondents (Sherif & Hovland, 1961).

The first study measures perceived price fairness and perceived price unfairness as separate constructs. As recommended by Dolnicar (2013), this study employs a two-step measurement: 1) a binary scale to identify the direction (fair or unfair), and 2) an ordinal scale to capture the direction and the magnitude of the perceived fairness and perceived unfairness. To ensure the direction and the magnitude of perceived price fairness and perceived price unfairness, perceived price unfairness was measured using a numerical scale. Using multiple types of measurement, the first study examines the effect of price increases in hedonic vs. utilitarian situations and its effect on consumers' behavioral response.

The second study proposes the bivariate structure of perceived price fairness and perceived price unfairness. The conventional bipolar measurement method cannot sufficiently explain neutrality or represent ambivalent valence of positive and negative evaluative processes (Cacioppo & Bernston, 1994). For example, when a hotel room rate

for a professional baseball game night is expected to increase up to $200 (from the average rate of $100), and the actual room rate is $160, how do consumers evaluate this price increase? It may be perceived as fair because it is less than the expected price by $40. But it may also be considered as unfair because it is $60 more than the usual rate. The bipolar structure of perceived fairness measurement cannot capture such mixed perceptions (Cacioppo & Bernston, 1994). Thus, the second study uses bivariate measurement to assess the effect of price increases on perceived fairness/unfairness independently, and examines the impact of perceived fairness and unfairness on booking intentions using the Structural Equation Modeling (SEM). In doing so, the moderating effect of hedonic and utilitarian situations on the research relationship is also investigated.

The third study examines the moderating role of consumers' involvement on the relationship among price increases, perceived price fairness/unfairness, and booking intentions. The benefit of employing the bivariate measurement of perceived fairness and unfairness is that it allows the research to identify inconsistent behavioral responses (Cacioppo & Bernston, 1994), unlike the bipolar scale where behavioral conflicts observed in consumer behavior such as "unfair price but willing to purchase" are hard to identify because conflicts are conceptualized as mutually exclusive (Cacioppo & Bernston, 1994).

Although hotel room rates and the external situations that cause price increases are the focal cues for consumers to evaluate fairness, unfairness, or both, each consumer has his/her subjective standard to evaluate the offered price based on their level of involvement in the situation (Chandrashekaran, 2012). Thus, the third study extends the

research model to include the consumers' involvement as a moderator to examine how the degree of involvement impacts the relationship among price increases, perceived price fairness/unfairness, and booking intentions.

1.2 Objectives of the Study

The purpose of this dissertation is to resolve the following limitations of prior research: 1) the limitation of using bipolar measurement for price fairness perceptions, 2) the lack of research on the relationships among price increases, consumers' price fairness perceptions, and behavioral intentions, 3) the limited research on the role of hedonic and utilitarian situations in perceived price fairness/unfairness and booking intentions, and 4) the lack of extant research on the moderating role of involvement in the relationship between price fairness perceptions and behavioral response. To address these limitations, this dissertation has four objectives:

1) Identify an appropriate method to measure consumers' perceived price fairness and unfairness,
2) Articulate relationships amongst price increases, consumers' perceived price fairness, perceived price unfairness, and booking intentions,
3) Investigate the role of hedonic and utilitarian situations on consumers' response to price increases, and
4) Investigate the moderating role of consumers' involvement on the relationship among price increases, perceived fairness/unfairness, and booking intentions.

Prior to examining the relationships, it is critical to find an appropriate measurement model for consumers' price fairness perceptions that will sufficiently capture the complicated perceptions on hotel dynamic pricing in hedonic and utilitarian situations. For empirical analysis and hypothesis testing, this dissertation uses the same scenario to manipulate experimental stimuli of price increases consistently (five levels of price increases: $20, $40, $60, $80, and $100) in hedonic (i.e., sporting event) and utilitarian (i.e., severe weather) events. Using the same manipulation across the three studies allows the authors to test and compare the measurement model of perceived price fairness and unfairness, and to examine the relationships among price increases, perceived price fairness and unfairness, and booking intentions.

1.3 Significance of the Study

The present study attempts to examine the distinction between perceived fairness and perceived unfairness. Unlike previous research which used a bipolar scale(s) (very unfair – very fair) or Likert scale (strongly disagree – strongly agree on the treatment object) to measure the perceived fairness and unfairness along one continuum, this study uses the separable constructs of perceived fairness and unfairness. The separable constructs of fairness and unfairness allow this research to articulate the relationships between fairness and booking intentions as well as between unfairness and booking intentions. The combined three studies reveal the various effects of fairness and unfairness on consumers booking intentions depending on different situations (hedonic vs. utilitarian) and consumers' high or low level of involvement.

The first study uses a two-step method to measure consumers' perceived fairness and unfairness separately, and conducts ANOVA and regression analysis to examine the relationship. The second study uses bivariate measurement to test the functional independency between perceived price fairness and unfairness and conducts SEM to analyze the structural relationship. The third study uses the same model used in the second study to test the moderating role of consumers' involvement in the research model and to extend the analysis to compare the moderating role of consumer's involvement between hedonic and utilitarian situations.

From the theoretical perspective, the three studies utilize reference pricing theory in examining consumers' fairness perceptions and behavioral response toward hotels' dynamic pricing, which provides a meaningful guideline for future research. The combined research challenges the predominate application of fair price principal of "dual entitlement" in the hotel industry, providing evidence that demand driven price increases are acceptable at the different levels depending on consumers' trip purpose (hedonic or utilitarian purposes) and their level of involvement in the given situations.

From the methodological perspective, this dissertation contributes to the scholarly work on measurements of perceived fairness and unfairness by providing empirical evidence that perceived fairness and unfairness are distinguishable and functionally independent. This study suggests that bivariate measurements enable researchers to sufficiently measure consumers' whole range of perceptions of perceived fairness and unfairness including the ambivalent perceptions of fairness and unfairness. Using the bivariate measurement, this study identifies the superior influence of fairness perceptions rather than unfairness perceptions on consumers' booking intentions.

This study also has practical implications for hotels. Better understanding about consumers' bivariate nature of perceived fairness and unfairness enables hotel owner / managers to set a marketing strategy during high demand period (high room rate period), promoting consumer's perceived fairness rather than reducing consumers' perceived unfairness. Counter-intuitive contextual (hedonic and utilitarian) insights should yield novel opportunities for relationship and transactional marketing options in the hotel industry as well as the local destination management industry. In addition, the role of consumers' involvement could help hotels leverage new customer service opportunities. Finally, this research assists in promoting collaborative work amongst hotel business, destination management and local government.

CHAPTER 2. STUDY 1: HEDONIC AND UTILITARIAN TRIP PURPOSE AND CONSUMERS' PERCEIVED PRICE UNFAIRNESS IN DYNAMIC HOTEL ROOM PRICING

The following article will be submitted to the International Journal of Hospitality Management and is included here as chapter two in this non-traditional thesis/dissertation. This article is written in APA style format.

2.1 Abstract

This study explores the effects of consumers' trip purpose (hedonic versus utilitarian) on their views of price unfairness in dynamic hotel room pricing. The results showed that consumers whose trip purpose was utilitarian perceived the price increases as being more unfair than consumers whose trip purpose was hedonic. This research also reconsiders the separable constructs of perceived price fairness and perceived price unfairness. Consumers' trip purpose was found to have a significant effect on perceived price unfairness but not on perceived price fairness. This finding empirically verifies the concept of separability of perceived price fairness and perceived price unfairness, calling into question whether a bi-polar continuum scale of perceived unfairness (extremely unfair – extremely fair) is appropriate to use in measuring perceived price unfairness. Consumers' perceived price unfairness restricted consumers' willingness to pay for those who had a utilitarian trip purpose but not for those who had a hedonic trip purpose. On

the other hand, consumers' perceived price fairness was associated with positive booking intentions for those who had a hedonic trip purpose but not for those who had utilitarian trip purpose. These findings suggest that hotels have greater pricing flexibility for consumers who have a hedonic trip purpose than for consumers who have a utilitarian trip purpose.

Key words: hedonic vs. utilitarian trip purpose, hotels' dynamic pricing, perceived price unfairness, perceived fair price, and WTP

2.2 Introduction

A threat to hotels' dynamic pricing is consumers' perceived price unfairness (Choi & Mattila, 2003; Heo & Lee, 2009). Dynamic pricing practices are primarily driven by demand, which violates the principle of fair price, or "dual entitlement." Dual entitlement proposes that both buyers and sellers are implicitly entitled to their reference price and reference profit, respectively. Many researchers have found conceptual and empirical evidence that consumers think of price increases driven by demand as being unfair (Campbell, 1999; Heo, Lee, & Matila, 2013; Maxwell, 2002). Therefore, consumers' perceived unfairness has been considered a constraint on a hotel's decision to increase prices and may restrict the hotel's capability to maximize profit.

Dynamic pricing by hotels has become an important strategic instrument in spite of the issues inherent in perceived unfairness (Chung & Petrick, 2015; Haddad, Hallak, & Assaker, 2015). In fact, most hotels take advantage of market conditions in high season by raising room rates to maximize revenue. During a professional sporting event or severe weather condition, for example, consumers are willing to pay a premium for a

hotel room even while considering the increased price to be unfair. An interesting question to ask is if consumers perceive an increased room rate to be unfair when they expect the room rates to increase. When people plan to book a hotel so that they can attend a favorite sporting event or seek needed accommodation alternatives, do they respond differently to the price increase? This research explored how consumers responded to price increases when they expected price increases during high demand periods. Contextual differences such as hedonic versus utilitarian trip purpose were examined based on how consumers' trip purpose affected the perceived price *un*fairness toward the price increases and the effect of this perceived price *un*fairness on their booking intentions and willingness to pay.

Many studies have addressed only the conceptual difference between perceived unfairness and perceived fairness (Xia, Monroe, & Cox, 2004). This research empirically examines the distinction between perceived fairness and perceived unfairness by measuring them as separate constructs. As recommended by Dolinicar (2013), this study employs a two-step measurement: 1) a binary scale to identify the direction (fair or unfair), and 2) an ordinal scale to capture the magnitude of attitudes. To ensure the direction and the magnitude of the perceived fairness and unfairness, individuals' numeric value for their internal reference price is measured and compared to the external reference price (treatment factor of price increases), calculating the numeric level of the perceived fairness (fair price > external reference price) and unfairness (fair price < external reference price).

Much literature is devoted to identifying factors that influence consumers' price fairness perceptions in response to hotel's dynamic pricing. However, relatively little

research examines the relationship between perceived fairness and behavioral response. Most previous literature used a bipolar (s) scale (very unfair – very fair) or Likert scale (strongly disagree- strongly agree on the treatment object) to measure the fairness perceptions in the one continuum structure. Employing the separable constructs of perceived price fairness and perceived price unfairness allows the current research to articulate the relationship between perceived fairness and booking intentions and between perceived unfairness and booking intentions.

This research had three objectives: 1) to investigate the effect of hedonic vs. utilitarian trip purposes on consumers' perceptions of price unfairness in response to price increases; 2) to empirically distinguish between perceived unfairness and perceived fairness; and 3) to examine the effects of perceived unfairness and perceived fairness on consumers' booking intentions and willingness to pay.

This study's identification of a consumer's purpose for a hotel stay with the perceived price unfairness yielded important theoretical and managerial implications. Theoretically, this study contributes to the scholarly work on strategic pricing by providing empirical evidence that a consumer's trip purpose has an effect on his or her perceived price unfairness about hotels' dynamic pricing. Further, this study empirically verifies the separable constructs of perceived price fairness and perceived price unfairness in order to show the importance of perceived price unfairness in consumers' behavioral responses toward hotels' dynamic pricing. Finally, the results of this study provide managerial insights that may help those in the hotel industry in pricing hotel room rates during peak seasons caused by external events such as hedonic and utilitarian events.

2.3 Literature Review

2.3.1 Hedonic versus Utilitarian Purpose of a Hotel Stay

The hotel market is very sensitive to external events such as sporting events, mega events, cultural events, and disaster-related events (e.g., severe weather, airplane crashes, etc.) which frame consumers' motivations to book a hotel room. Depending on the external event, consumers' purposes for hotel stays may be categorized as having a hedonic and/or a utilitarian value (Wakefield & Inman, 2003). For example, during a sporting event, consumers travel and book a hotel stay with intentions to enjoy the game and the fun environment (hedonic purpose), whereas during a severe weather related event, consumers may seek a hotel room as a form of alternative housing (utilitarian purpose).

Hedonic value is defined as an affective experiential process, or the seeking of fun, pleasure, recreation, and fantasy (Hirschman & Holbrook, 1982; Holbrook & Hirschman, 1982). Utilitarian value stems from a cognitive problem-solving process, in which consumers make their decision based on a more logical information process to satisfy their needs (Hirschman & Holbrook, 1982). Usually hotel stays have been categorized as appealing to both hedonic and utilitarian values depending on the hotel's classification. A stay in a luxury or an upscale hotel can be assessed based on consumers' hedonic-influenced motivations, whereas a hotel stay in a midscale or economy hotel can be assessed based on utilitarian motivations. Although each property might be either hedonic or utilitarian, the primary purpose of a hotel stay may be situationally affected by a particular external situation.

As research has shown, situational contexts impact consumers responses to price increases (Monroe, 2003; 2012). Wakefield and Inman (2003) found that consumers' price sensitivity was different when consumers had hedonic versus utilitarian motivation. With hedonic motivation, consumers considered the experience to be a higher priority than the money (Holbrook & Hirschman, 1982), meaning that consumers were less sensitive to price. When consumers pursued a hedonic experience, they tended to make decisions based on positive emotions (e.g., fun, excitement, and pleasure), which might make them willing to pay extra for a product or service (Hirschman & Holbrook, 1982; Wakefield & Inman, 2003).

On the other hand, with utilitarian motivation, consumers were more sensitive to price (Wakefield & Inman, 2003) and thus were thinking logically when they made purchasing decisions (i.e. hotel booking), as illustrated by the information processing model (Hirschman & Holbrook, 1982). Thus, consumers may have a different perceived price value for their consumption experience (hotel stay) depending on their hedonic versus utilitarian purpose even though they are purchasing the same service (a hotel stay). In the same vein, it is likely that consumers' perceived price fairness could also be different when consumers had a hedonic or a utilitarian purpose when they booked a hotel.

H_1. *Consumers whose trip purpose was utilitarian perceive price increases to be more unfair than consumers whose trip purpose was hedonic.*

2.3.2 Reference Price: Perceived Fair Price

When consumers make a fair judgment, they activate reference prices (Kalyanaram & Winder, 1995; Xia et al., 2004), which includes internal reference prices and external reference prices. Internal reference prices are stored in people's memory (Biswas & Blair, 1991) based on the price they paid previously or their most frequently paid price. Internal reference is referred to as "expected or fair price" (Thaler, 1985). External prices are described by terms such as a market price, advertised price, observed price, and actual price. When consumers are exposed to an external reference price (actual price), they tend to recall the internal reference price in their memory when evaluating the actual price to see if it is fair or not (Monroe, 2003). The price discrepancies between internal reference price and external reference price affect perceived price unfairness (Monroe, 2012; Xia et al., 2004).

The internal reference price (perceived fair price) is the consumers' subjective perceptions of price, which is affected by a variety of situations and conditions (Monroe, 2003). This concept is theoretically supported by adaptation theory which states that the external reference price adjusts the internal reference price according to the adaptation level of the price, depending on contextual factors (Kalyanaram & Winder, 1995; Monroe, 2003). This concept can be illustrated using a hotel-booking situation. Since most people have been exposed to the practice of dynamic pricing in the hotel industry, they may expect price fluctuations driven by external events. When consumers book a hotel room so they can attend a sporting event, they will have a higher reference price for fair price than when they book a hotel room as alternative housing. Prior to checking the hotel pricing information, they may anticipate an expected hotel room rate.

According to adaptation theory, once consumers are exposed to the actual price, their perceived fair price will change. Since any stimuli for price increases are considered undesirable (Vaidyanathan & Aggarwal, 2003), it is reasonable to assume that the external reference price limits the perceived fair price.

Based on the subjective characteristics of the internal reference price, we hypothesized that:

H_2. *A perceived fair price is different depending on consumers' trip purpose. When consumers have a hedonic trip purpose, the perceived fair prices are higher than when they have a utilitarian trip purpose.*

H_3. *The external reference price adjusts to consumers' perceived fair price. When consumers are exposed to the external reference price, consumers change their perceived fair price.*

2.3.3 Separability of Perceived Price Fairness versus Perceived Price Unfairness

Several researchers have shown that perceived unfairness is conceptually different from perceived fairness because perceived unfairness is clearer and sharper. Further, consumers are more able to clearly articulate the causal antecedents and consequences of perceived unfairness than they are those of perceived fairness (Haws & Bearden, 2006; Xia et al., 2004). Unfair situations are more salient (Adams, 1963; Kanouse, 1984) and more distinctly remembered than fair ones (Taylor & Fiske, 1978) because unfair events are phenomenologically associated with a sense of loss while fair events are associated

with gain (Lupfer, Weeks, Doan, & Houston, 2000). According to prospect theory, the effects of loss are more noticeably felt than the effects of gain. This phenomenon is termed "losses loom larger than gains" (Kahneman & Tversky, 1979) and it has been empirically applied to perceived unfairness and fairness (Kalapurakal, et al., 1991).

Prospect theory can also be applied to hotel customers' transactions. When a consumer perceives the published hotel price to be fair, he/she might evaluate the deal as a gain. In contrast, when a consumer perceives the published hotel price to be unfair, he/she might interpret those feelings as loss. As in asymmetric loss aversion, perceived fairness and perceived unfairness are asymmetrical (Oh, 2003). Even though many researchers have suggested that perceived unfairness is different from perceived fairness, perceived price fairness and unfairness have usually been measured on bipolar continuum scales: for example, fair (extremely fair – extremely unfair), reasonable (extremely reasonable – extremely unreasonable), and acceptable (extremely acceptable – extremely unacceptable) (Bolton, Warlop et al. 2003, Vaidyanathan and Aggarwal 2003). The popular practice of using a bipolar scale in the same continuum is anchored by the two extremes, which may yield concrete results but cause biased results as well. Cacioppo and Bernston claimed that neither negative nor positive evaluative activation could be measured on a bipolar continuum scale (1994).

Perceived price fairness cannot be an issue until consumers perceive a given price to be unfair (Xia et al., 2004). Perceived price unfairness is a clearer response to any antecedent and it also invokes a more salient behavioral response than perceived price fairness (Lupfer et al., 2000). Therefore, it is critical for researchers to distinguish perceived price unfairness from perceived price fairness prior to identifying problems and

solutions to reduce the tension of perceived unfairness in an exchange relationship (Adams, 1963). Based on this discussion, we hypothesized that

H4. *The effect of price increases on perceived price unfairness is stronger than one on perceived price fairness.*

2.3.4 Effect of Perceived Unfairness and Fairness on Behavioral Responses

Many studies have posited that perceived unfairness negatively influences purchase intentions (Campbell, 1999; Homburg, Hoyer, & Koschate, 2005; Maxwell, 2002) even though there are certain situations in which consumers begrudgingly pay prices they consider unfair (e.g., dining at a resort restaurant, buying ice water at a beach bar.) (Okun, 1981). Professional sporting events and weather related events can be examples of situations that may lead consumers to book a hotel unwillingly or to pay unfair prices. It is more difficult to determine consumers' perceived price unfairness within the context of a hotel stay than it is in other consumption situations because a hotel stay is not only categorized as product/service consumption, but also considered in terms of its temporal and spatial value. In other words, the event date and the location where the event occurs limit a hotel stay during a certain event. Therefore, the value of a hotel stay is not simply calculated by the monetary prices that consumers pay. Their purpose for a hotel stay is determined by the characteristics of the event they are attending (pleasure seeking or work-related). As such, consumers' booking intentions and the level of willingness to pay for a hotel stay vary depending on the perceived fairness or unfairness within the particular situation.

For example, when people want to attend a sporting event, they are less sensitive to price increases and consider the price increases to be fair. This positive attitude toward the given situation affects their booking intentions and willingness to pay extra to seek the pleasure that they expect to have from attending the game (Thaler, 1985). In other cases, when people desperately need a place to stay because they are unable to remain at home, they may use ethical criteria that impute the price increases to be unfair, which negatively affects their booking intentions and willingness to pay. Based on this logic, we hypothesized that:

H_5. *For consumers whose trip purpose is utilitarian, perceived price unfairness has a stronger effect on behavioral responses (booking intentions and WTP) than perceived price fairness.*

H_6. *For consumers whose trip purpose is hedonic, perceived price fairness has a stronger effect on behavioral responses (booking intentions and WTP) than perceived price unfairness.*

2.4 Methodology

2.4.1 Research Design

A scenario-based experiment was used to test consumers' responses to hotel price increases (this included five levels of price increases: $20, $40, $60, $80, and $100) when they had hedonic versus utilitarian hotel staying purposes (sporting events vs. alternative housing) in a midscale hotel (e.g. Ramada, La Quinta, Howard Johnson, etc.). These

situations were designed to represent situations that drive consumers with a hedonic or a utilitarian motivation to book a hotel. For example, consumers in a sporting event would book a hotel to enjoy the hedonic value (watching a sports game), while consumers in a utilitarian event would book a hotel for the utility of a hotel stay.

A pretest was conducted to identify the price level that consumers would expect in the given scenarios. The participants were asked to indicate a reasonable price range (the lowest reasonable price and the highest acceptable price) for both hedonic and utilitarian cases. The results of the pretest (N=40) showed that, at a hotel located in the downtown area of a mid-size metropolitan city with an annual average room rate of $100, consumers' highest expected room rate was $126.56 for an alternative housing situation (a utilitarian situation) and $173.71 for a sporting event (a hedonic purpose). In addition, we reviewed the Smith Travel Research Center's (STR) census data and found that during Super Bowl XLVI, hotels in Indianapolis increased room rates up to 230% from those of the previous year and during Hurricane Ike, hotels in Texas increased room rates up to 50% from the previous year. Therefore, five levels of magnitude of price increases ($20, $40, $60, $80, and $100) were generated to test consumer response; these covered the highest expected prices for both hedonic and utilitarian trip purpose situations (sporting versus severe weather events). To verify the appropriate level of price increases, each respondent was asked to indicate his/her internal reference price (the highest fair price).

The utilitarian scenario was carefully created using the case of a flood. We used this example due to the frequent occurrence of floods. In cases of severe weather, there are laws against price gouging that restrict price increases when a federal or state

emergency is declared. However, price gouging laws are not part of federal law, but rather state law. Price gouging laws are not ubiquitous; however, 34 states and the District of Columbia currently have anti-price gouging laws and the specific regulations differ in each state (Giberson, 2011). This research scenario uses the case of a flood, which frequently occurs and is not considered to be a disaster nor to be involved with an emergency. Floods that only affect local areas are not usually covered by price gouging laws.

The test scenarios were as follows:

Hedonic hotel stay purpose scenario:

Imagine that you are planning a trip to watch your favorite professional football team play. You plan to stay the night. You have identified a mid-scale hotel where you want to stay and you know that the average room rate for this hotel is $100. But because of the football game, the hotel is expected to be fully booked on the night of your stay. When you are trying to book a room, you find out that the rates are ***$120/$140/$160/$180/$200*** per night.

Utilitarian hotel stay purpose scenario:

Imagine that your neighborhood is flooded and your house has lost power due to a storm. You are planning to stay in a hotel for the night to avoid the inconvenience of staying in your home without power. You have identified a mid-scale hotel where you want to stay for the night and you know that the average room rate for this hotel is $100. But because this hotel has not been affected by the storm, the

hotel is expected to be fully booked for the night of your stay. When you are trying to book a room, you find the rates are ***$120/$140 / $160 / $180 / $200*** per night.

In order to identify consumers' internal reference rates (fair price) and their willingness to pay in the given hedonic and utilitarian scenarios, two additional cells were created as control groups. We provided the annual average price information ($100) and the tested situations (sporting event and flood) only. These control groups were asked to list their perceived fair price as well as their willingness to pay which are not affected by hotel's increased room rate.

When creating an experimental design, it is critical for researchers to randomly assign a sample in each experiment to control for unwanted bias and unobserved variables (Kirk, 2014), as well as to determine the precise causal relationship (Wikinson, 1999). Therefore, this study used a completely randomized block design with one treatment of five levels of price increases in two blocks (hedonic versus utilitarian hotel stay purposes). Each survey participant was randomly assigned to 1 of 12 different scenarios (including two control cells) and was asked about his/her perception of the given circumstance and behavioral intentions in response to the given situation. This research employed an Internet survey website which we restricted to U.S. residents only.

2.4.2 Variables and Analytical Procedures

The questionnaire consisted of three sections. The first section was the scenario. After reading a randomly assigned scenario, participants were asked to mark their

perceived price fairness in the given situation. The predominant method for measuring perceived price fairness and unfairness is to use a same continuum scale: fair (extremely (very) unfair – extremely (very) fair), reasonable (extremely unreasonable – extremely reasonable), and acceptable (extremely unacceptable – extremely acceptable) (Bolton, 2003; Xia et al., 2004).

However, in our analysis, we avoided using bipolar continuum scales and instead used three different scales – binary, ordinal, and numeric – to more rigorously measure perceived fairness and unfairness toward price increases. Although bipolar continuum scales are useful for capturing direction and magnitude, its confounding of direction and magnitude causes a tendency to choose middle answer options (Dolnicar, 2013; Roster, Rogers, Hozier, Baker, & Albaum, 2007). Dolnicar (2013) suggested a combination of a binary and a Likert scale to capture the direction and the magnitude separately in a quick and simple way.

Once respondents read the scenario, they stated their position toward the given price increase as fair or unfair. This information was coded as a binary variable (‘0’ for fair and ‘1’ for unfair), indicating the direction. A binary response is considered to be the most accurate means to obtain an estimate of the parameter values (Chalonder & Larntz, 1989). The subsequent question extended the binary variable to a 5 point Likert scale (1: neutral – 5: extremely fair (or unfair). Respondents who judged the given situation as unfair determined the level of perceived unfairness, while those who judged the given situation as fair determined the level of perceived fairness. The difference between responses on a continuum scale of perceived fairness measurement (very unfair – very

fair) and responses on the sequential perceived fairness and perceived unfairness measurements were treated as two separate constructs.

$Perceived\ unfairness = \beta_1 + \beta_2 x_{2i} + \beta_3 x_{3i}$ for those who judged the given situation unfair

$Perceived\ fairness = \beta_1 + \beta_2 x_{2i} + \beta_3 x_{3i}$ for those who judged the given situation fair

Next, perceived fairness was measured using a numerical scale. Respondents were asked their perceived fair price for the given scenario ("What price would you consider to be fair?"). A consumer's perceived fair price is regarded as a consumer's internal reference price in a given situation (Thaler, 1985). Perceived price unfairness conceptually defines the deviation between external reference price and internal reference price (Xia et al., 2004). To obtain a numerical scale of perceived price unfairness, we subtracted internal price (fair price) from experimental scenario price (treatment price). If a fair price was higher than the treatment price, this was considered to be perceived fairness. If a fair price was lower than the treatment price, this was considered to be perceived unfairness.

The second section included questions intended to assess the participants' potential behavioral responses, including booking intentions and willingness to pay (hereafter: WTP). WTP was used in measuring the maximum monetary value a consumer would agree to pay (Miller et al., 2011) in order to obtain a hotel room in the given situation. In this section, respondents were asked, "What is the highest rate you would be willing to pay under the described circumstance?" and a scale bar between $0 and $400 was provided. Since consumers often perceive all higher prices to be undesirable

(Vaidyanathan & Aggarwal, 2003), we used the phrase "the highest rate" in the questionnaire to measure the realistic range of WTP.

The final section assessed the participants' demographic variables (i.e., gender, age, education, marital status, annual household income, and employment). At the end of the survey, we added a question in order to verify whether each respondent fully understood the given situation. If respondents chose the wrong answer, we assumed that these respondents were not qualified to participate in the project and so we did not include their answers.

To analyze causal effect price increases in hedonic versus utilitarian situations concerning consumers' perceived (un)fairness, we used a logistic regression analysis of the binary dependent variable on the judgment of "fair or unfair" and an ANOVA test to obtain the level of perceived unfairness and fairness. To analyze the extended relationship between perceived price unfairness and consumers' behavioral responses, this study used Ordinal Least Squares (OLS) regression.

2.5 Results

2.5.1 Respondents' Profiles and Random Assignment of Scenarios

A total of 638 surveys were collected from the Internet survey service, Amazon Mechanical Turk (MTurk). MTurk is an online survey service with approximately 500,000 voluntary individuals, referred to as "workers," who participate in a survey in return for payment (Amazon Mechanical Turk, 2014). MTurk has large sample pools that are demographically diverse (Buhrmester, Kwang, & Gosling, 2011; Mason & Suri, 2012). Data quality obtained from MTurk is considered to be as reliable as that from

conventional sampling methods (Buhrmester et al., 2011). Survey participants are required to be at least 18 years old and residents of the United States. Each participant's location information (longitude and latitude) was obtained and imported to ArcGIS Mapping application (www.arcgis.com) to verify participant' residence in the United States.

After screening out surveys that failed the verification question and eliminating the surveys with missing data, we were able to use 603 responses for the analysis. Outliers were retained, as Kirk (2013) recommended, because outliers reflect the random variability inherent in a completely randomized assignment. Table 1 includes the descriptive statistics of the random assignment for each scenario and indicates that the samples were almost equally assigned to each scenario. Within the 12 cells, 2 cells were control groups showing the internal reference price as the fair price and WTP both in a hedonic and a utilitarian situation. These two control groups were not used to test our hypothesis but they did verify that the magnitude of price increases included consumers' expected internal reference price in both situations.

Table 2.1 Random Assignment for the Scenarios

N=603	Price increases						
	No price[1]	+$20	+$40	+$60	+$80	+$100	Subtotal
Hedonic	51	47	50	52	49	53	302
Utilitarian	52	50	48	52	49	50	301
Subtotal	103	97	98	104	98	103	603

Note: 1. Control groups where no price information was given.

Table 2.2 Respondents' Demographics (N=603)

Characteristics	Freq.	Percent	Characteristics	Freq.	Percent
Gender			**Marital Status**		
Male	342	56.7%	Married	183	30.3%
Female	261	43.3%	Single	413	68.5%
			Other	7	1.2%
Age			**Total annual household income**		
18-20	15	2.5%	Less than $20,000	209	34.6%
21-30	285	47.4%	$20,001 - $40,000	184	30.5%
31-40	171	28.3%	$40,001 – $60,000	102	16.9%
41-50	79	13.0%	$60,001 – $80,000	64	10.6%
51 and older	53	8.8%	More than $80,001	45	7.4%
Education			**Employment**		
High School or equivalent	167	27.7%	Student	61	10.2%
2-year college degree	116	19.2%	Part-time employed	110	18.5%
4-year college degree	246	40.7%	Full-time employed	304	51.0%
Graduate / Professional degree	69	11.4%	Unemployed	72	12.1%
Other	6	1.0%	Others	49	8.2%

Note: Insignificant level of χ^2 indicates the homogeneity of the sample distribution in each group

Table 2.2 shows the respondents' demographics and profiles. Among the 603 valid respondents, 56.7% were male and 43.3% were female. The average age of the respondents was 33.52 years old, and the ages ranged from 18 to 72. The average annual household income levels indicated that 82% of the respondents had an annual household

income of $60,000 or below and 18% had an annual income over $60,000. The sample included 48.6 % of respondents with a high school or associate's degree, and 51.4% with a bachelor's degree or higher. On average, 11.5% of the respondents had not stayed in a hotel in the past 12 months, 67.4% of the respondents had stayed in a hotel 1 to 4 times in the past 12 months, and 21.1% of the respondents had stayed in a hotel more than 5 times in the past 12 months. Of the respondents, 54.1% of them usually stayed in mid-scale hotels, 8.1% of them usually stayed in upscale and luxury hotels, and 37.8% of them usually stayed in economy or budget hotels. Among all the respondents, 80.6% were aware of dynamic pricing.

To ensure the randomness and homogeneity of the sample distribution in each cell, a chi-squares test was conducted, which showed an insignificant level through all demographic variables ($\chi^2_{\text{gender}} = 11.373$; $p > 0.05$, $\chi^2_{\text{income}} = 49.987$, $p > 0.05$; $\chi^2_{\text{age}} = 42.022$, $p > 0.05$). Therefore, the data could be used to test the hypotheses.

2.5.2 Hypothesis Test

2.5.2.1 Hedonic vs. Utilitarian Trip Purpose and Perceived Price Unfairness

For the analysis, the subjects' responses to the question of whether they would judge a given scenario as unfair were coded as 1 = unfair and 0 = fair. The percentage of respondents who chose "unfair" could be simply calculated as a mean of the responses that judged a given situation as "unfair." Figure 2.1 demonstrates the percentage of respondents who chose unfair using five levels of price increases for a hedonic purpose and a utilitarian purpose. Logistic regression was used to analyze the significance of the

difference between the number of people who judged a given situation as "fair" and the number of people who judged a given situation as "unfair." The results showed significant effects of price increases ($\beta_{price\ increases};\ 0.032,\ p < 0.001$) and trip purpose ($\beta_{Trip\ purpose};\ -.80,\ p < 0.001$) on consumers' judgment of price unfairness. This result confirmed that price increases and situations do have a significant effect on consumers' judgement of price unfairness. The percentage of subjects who responded "unfair" consistently increased over the five levels of price increases, and there were almost 20% more respondents with a utilitarian purpose than with a hedonic purpose that judged a price increase to be "unfair." This relationship is illustrated in Figure 2.1 and supported H1.

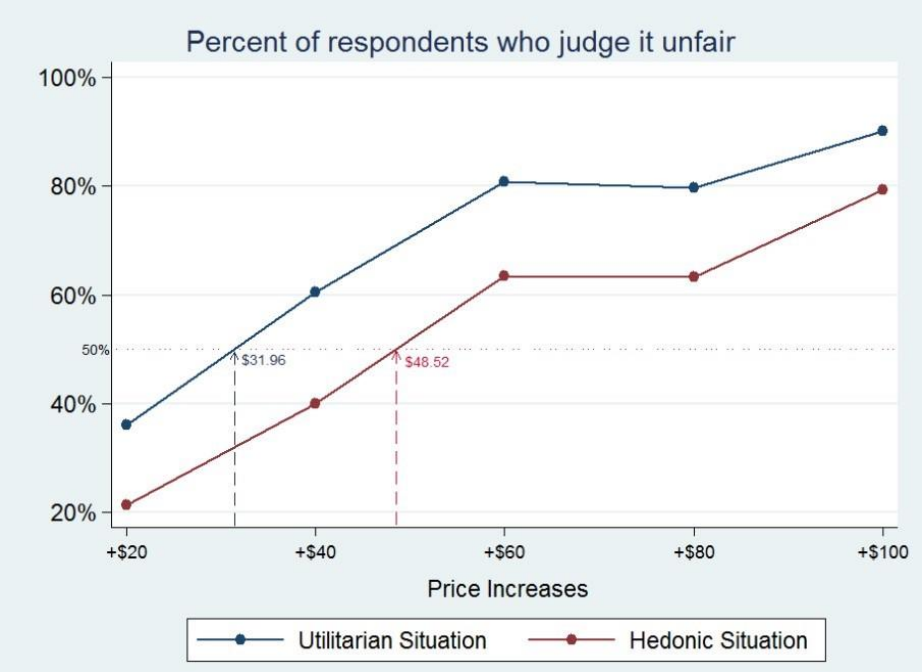


Figure 2.1 Percent of Respondents Who Judged the Given Situation to Be Unfair

2.5.2.2 Reference Price: Perceived Fair Price

H_2 states that perceived fair prices are different depending on consumers' trip purpose. The results of *t*-Test show that the perceived fair prices for the hedonic trip purpose group (Mean=$129.14, SD=24.04) and the utilitarian trip purpose group (Mean = $ 118.86, SD=27.92) were significantly different (*t*-Test $_{(601)}$= -5.18, $p < 0.0001$). This result is illustrated in Figure 2.2 and supported H_2.

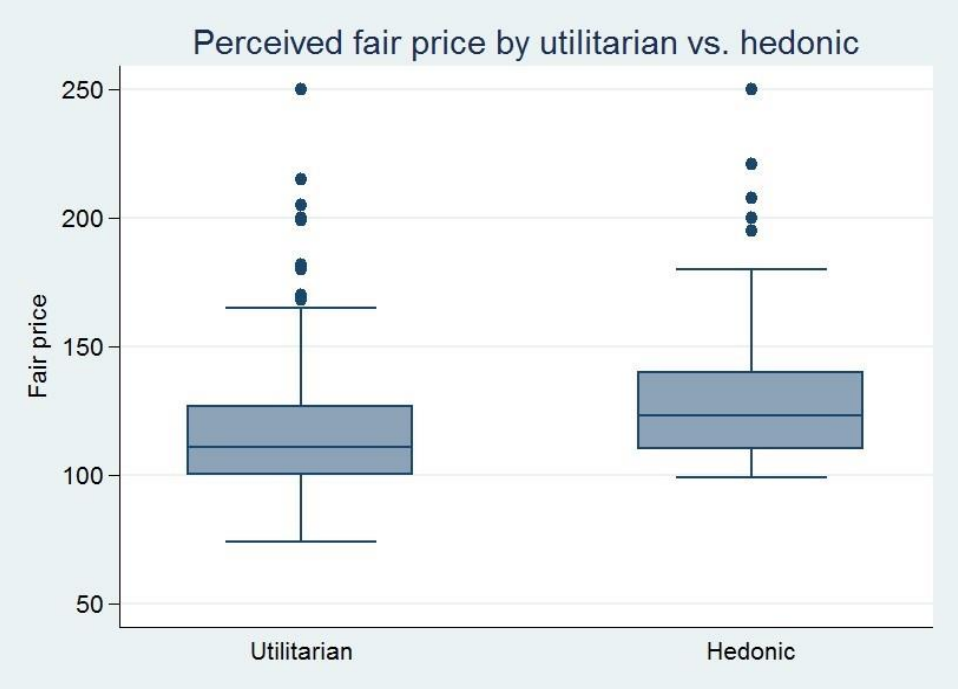


Figure 2.2 Perceived Fair Price Compared by Utilitarian vs. Hedonic Trip Purpose

H_3 states that the external reference price adjusts to consumers' perceived fair price. The results of *t*-Test show that perceived fair price when consumers were only given the situational information without the external reference price (Mean= $129.97,

SD=31.60) was significantly different (t-Test $_{601}$= 2.47, p< 0.01) from the perceived fair price when consumers were exposed to the external price (Mean = $122.85, SD=25.22). Therefore, H_3 was supported (Figure 2.3) showing that when consumers were exposed to external reference price, they changed their perceived fair price.

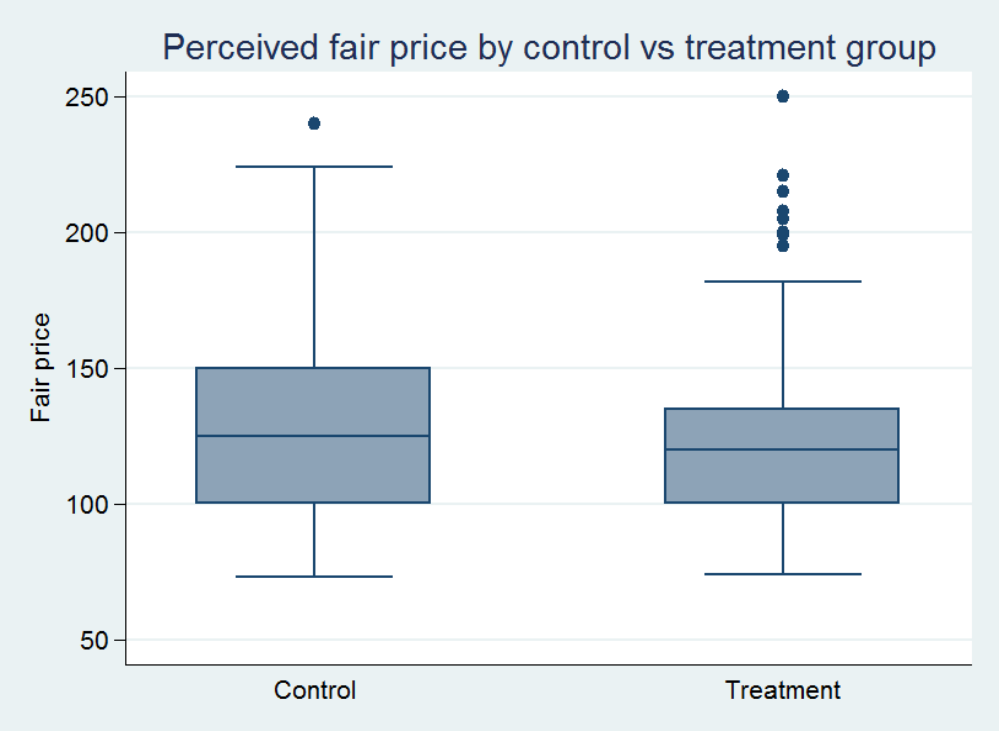


Figure 2.3 Perceived Fair Price Comparing the Control Group with the Treatment Group

2.5.2.3 Perceived Price Fairness versus Perceived Price Unfairness

Table 2.3 gives the results of a two-way ANOVA test showing that the level of perceived price unfairness was significantly affected by both price increase ($F_{4, 309}$ = 2.96, $p < 0.05$) and trip purpose ($F_{1, 309}$ = 10.05, $p < 0.01$), while the results of the two-way ANOVA of perceived fairness showed insignificant effects of price increases ($F_{4, 191}$

= .99, *NS*) and trip purpose ($F_{1, 191} = .77$, *NS*) on the level of perceived price fairness. The results supported H_4, showing that perceived price unfairness and perceived price fairness operate differently.

Table 2.3 Two-way ANOVA of Perceived Price Unfairness

Source	Sum of squares	df	Mean Square	*F*-statistic	Sig.
Model	25.228	9	2.803	2.69	0.005
Price increases	12.354	4	3.088	2.96	0.020
Trip purpose	10.472	1	10.472	10.05	0.005
Price increases x trip purpose	4..221	4	1.055	1.01	0.401
Residual	311.690	209	1.042		
Total	336.919	308	1.094		

N= 309; *R*-squared: 0.075

Additionally, we measured perceived fair price as an internal reference price in each experimental group to calculate the discrepancy between the internal and external reference prices, thus producing the numerical level of perceived unfairness and perceived fairness. Perceived unfairness is calculated when the external reference price is higher than perceived fairness, while perceived fairness is calculated when perceived fairness is higher than the external reference price. Figure 2.4 demonstrates the distribution of perceived unfairness and perceived fairness in each test group. As shown in Table 4, numerically measured perceived unfairness was significantly affected by price increases ($F_{1, 419} = 45.57$, $p < 0.001$) and trip purpose ($F_{1, 419} = 186.67$, $p < 0.001$), but

numerically measured perceived fairness was not affected by price increases ($F_{4, 75} = .80$, *NS*) or trip purpose ($F_{1, 75} = .47$, *NS*). Additionally, the trip purpose has an interaction effect on the relationship between price increases and numerically measured model of perceived unfairness ($F_{1, 420} = 2.55$, $p < 0.05$).

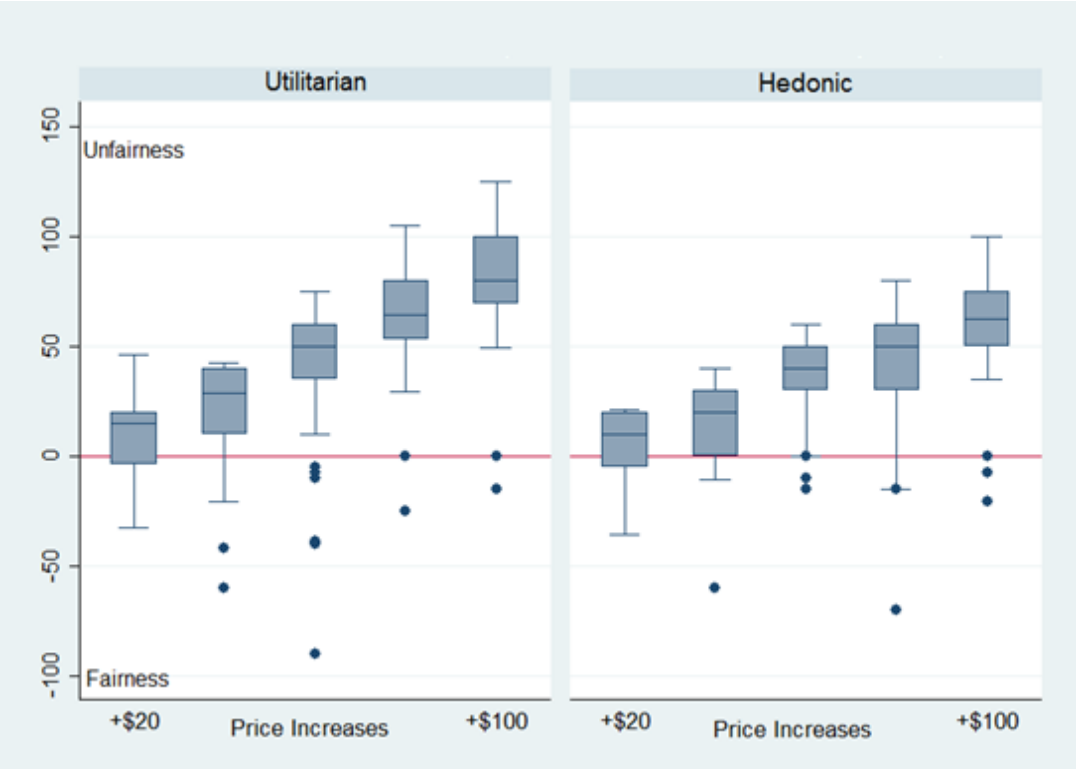


Figure 2.4 Numeric Price Fairness and Unfairness

Note: The red line on y=0 when the observed price is equal to the perceived fair price.

Table 2.4 Two-way ANOVA of Numerical Measured Unfairness

Source	Sum of squares	df	Mean Square	*F*-statistic	Sig.
Model	188170	9	20907	89.40	0.000
Price increases	10890	1	10890	46.57	0.000
Trip purpose	174620	4	43655	186.67	0.000
Price increases x Trip purpose	2383	4	595	2.55	0.039
Residual	95883	410	233		
Total	284053	419			

N= 420; *R*-squared: 0.66

Figure 2.4 illustrates the numerically measured unfairness and fairness. When respondents were asked to determine their position on whether the given situation was fair or unfair, 305 respondents judged the given situation as unfair while 190 respondents judged it as fair. However, the numerically measured unfairness (observed price – perceived fair price) showed that 420 respondents had lower perceived fair price than observed price (negative price discrepancy) while only 75 respondents had higher perceived fair price than observed price (positive price discrepancy). These unmatched distributions of fair – unfair respondents were discussed by Haw and Bearden (2006), who demonstrated that price discrepancies do not always cause perceived price unfairness (Figure 2.5).

Table 2.5 N of Respondents Who Judged the Given Situation as Fair or Unfair

Measurement method	Unfair	Fair
Binary scale	305	190
Numerical scale:		
Perceived fair price – Observed price < 0 : Unfair	420	75
Perceived fair price – Observed price > 0 : Fair		
Difference	105	115

2.5.2.4 Perceived Price Unfairness in Consumers' Behavioral Responses

To test the interaction effect of hedonic vs. utilitarian trip purpose on the relationship between perceived price unfairness or fairness and consumers' behavioral responses, a two-way ANOVA test was conducted. The results showed that there was no significant interaction effect of trip purpose on the relationship between perceived unfairness and booking intentions($F_{3, 309} = .43$, *NS)* or willingness to pay ($F_{3, 309} = .43$, *NS)*. Therefore, $\mathbf{H_5}$ was not supported.

Meanwhile, the interaction effect of trip purpose on the relationship between perceived fairness and booking intentions was significant for the hedonic trip purpose group but not for the utilitarian trip purpose group ($F_{3, 191} = 3.60$, $p < 0.05$). However, there was no significant interaction effect on the relationship between perceived fairness and WTP ($F_{3. 191} = 1.42$, *N.S*). Therefore, $\mathbf{H_6}$ was partially supported.

Importantly, this study revealed the different patterns of relationship among perceived fairness, perceived unfairness, and behavioral responses. Figure 2.5 presents four plots, illustrating the prediction of booking intentions by a) fair or unfair judgement (binary scale), b) numerically measured price unfairness (price discrepancies), c) level of perceived price unfairness, and d) level of perceived price fairness. These four plots reveal that perceived price fairness and perceived price unfairness operated differently and that this phenomenon could not be uncovered when we employed the most frequently used bipolar continuum scales of perceived unfairness.

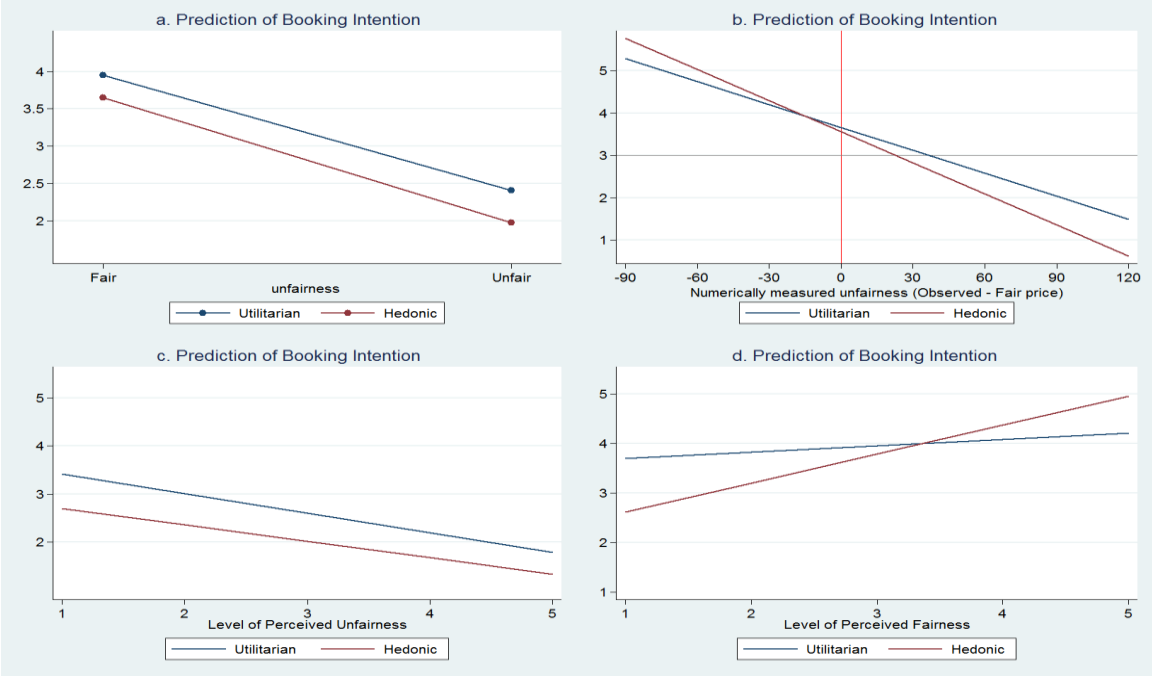


Figure 2.5 Prediction of Booking Intentions by Different Measurements of Perceived (Un)fairness

a. Booking intentions by unfairness judgement
b. Booking intentions by numerically measured unfairness (Observed price – perceived fair price)
c. Booking intentions by level of perceived unfairness
d. Booking intentions by level of perceived fairness

2.5.2.5 Additional Findings

Additionally, consumers' perceived fair price and willingness to pay were compared. These analyses and findings are exploratory in nature and as such are findings for which no hypotheses have been made. This study created two control groups to identify consumers' perceived fair price and WTP in a given situation without a price treatment. Consumers' perceived fair price values and WTP were measured using a numerical scale along with a dollar value to identify consumers' internal reference price as well as the amount they were willing to spend to book a hotel in a given hedonic or utilitarian situation.

Figure 2.6 illustrates the pattern of the levels of perceived fair price and WTP in experimental conditions, including the no price treatment condition. Certain levels of the perceived fair price of the control groups indicated that consumers already had their own level of fair price ($122.06 in a utilitarian and $135.49 in a hedonic situation) and WTP ($139.77 in a utilitarian and $150.49 in a hedonic situation). As discussed in **H_2**, when respondents were offered hotel price information, they adjusted their perceived fair price to go lower than the hotel's published price. When respondents in the utilitarian purpose group were exposed to a hotel's increased price, they showed a consistent range for their perceived fair price ($109.4 - $119.48) and for their WTP ($137.40 - $147.24), which were not affected by price increases ($F_{4, 246} = 1.17$, $p>0.05$; $F_{4, 246} = 0.82$, $p> 0.05$). Unlike for consumers in the utilitarian trip purpose group, those in the hedonic trip purpose group increased their level of perceived fair price and WTP in accordance with the level of price increases ($F_{4, 244} = 9.71$, $p<0.001$; $F_{4, 244} = 4.21$, $p < 0.01$). There were significant differences between the hedonic versus the utilitarian trip purpose groups in terms of a

consumer's assessed fair price ($F_{1, 499} = 22.89$, $p<0.001$) although not in WTP ($F_{1, 498} = 1.68$, $p > 0.05$).

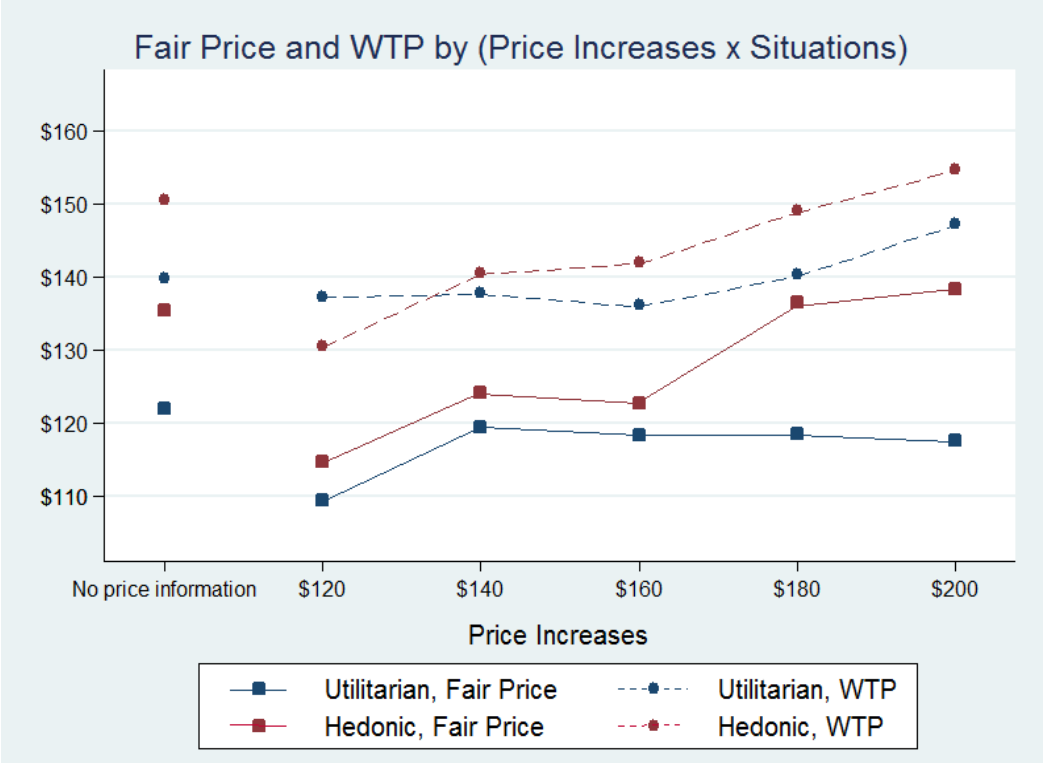


Figure 2.6 Fair Price and WTP by Experimental Conditions

2.6 Conclusion

2.6.1 Discussion

The current study explored the effects of consumers' trip purpose (hedonic versus utilitarian) on their perceived price unfairness and fairness in dynamic hotel room pricing during high demand time periods. By utilizing a scenario-based experiment, this study found that hedonic vs. utilitarian trip purposes and price increases did significantly affect

consumers' judgement of price unfairness (H_1) and perceived fair price (H_2). As Figure 2.1 shows, approximately 20% more respondents who had a utilitarian purpose for their hotel stay evaluated price increases as being unfair in comparison to respondents who had a hedonic trip purpose. Also, consumers who had a hedonic trip purpose had a higher internal reference price (perceived fair price) than those who had a utilitarian trip purpose.

Table 2.6 Hypothesis Results

	Hypothesis	**Results**
H_1	Consumers whose trip purpose was utilitarian perceive price increases to be more unfair than consumers whose trip purpose was hedonic.	Supported
H_2	Perceived fair price is different depending on consumers' trip purpose. When consumers have a hedonic trip purpose, the perceived fair prices are higher than when they have a utilitarian trip purpose.	Supported
H_3	The external reference price adjusts to consumers' perceived fair price. When consumers are exposed to the external reference price, consumers change their perceived fair price.	Supported
H_4	The effect of price increases on perceived price unfairness is stronger than one on perceived price fairness.	Supported
H_5	For consumers whose trip purpose is utilitarian, perceived price unfairness has a stronger effect on behavioral responses (booking intentions and WTP) than perceived price fairness.	Not supported
H_6	For consumers whose trip purpose is hedonic, perceived price fairness has a stronger effect on behavioral responses (booking intentions and WTP) than perceived price unfairness.	Partially supported

This research confirms that the external reference price adjust to consumers' perceived fair price (internal reference price). The control groups' perceived fair price (without knowledge of a hotel's published price) was higher than the test groups' perceived fair price (after being exposed to the hotel's published price), as illustrated in Figure 2.3 and Figure 2.6. Consumers may use a hotel's published price to adjust their perceived fair price to a price below the published price. The gap in perceived fair price between the control group and the test group can serve as evidence that consumers always consider a seller's price increase to be unfair (Vaidyanathan & Aggarwal, 2003). Thus, it is critical to admit that increased price information itself may cause the perceived price unfairness although consumers may expect price increases due to higher demand.

The most important finding in this research is the empirical evidence of the distinction between perceived price unfairness and perceived price fairness. Many researchers have conjectured that perceived fairness and perceived unfairness are different constructs, but none have attempted to measure fairness and unfairness separately. Hedonic vs. utilitarian trip purposes have been shown to have a significant effect on perceived price unfairness but not on perceived price fairness. Interestingly, perceived price unfairness affected consumers in the utilitarian trip purpose group and their willingness to pay but not consumers in the hedonic trip purpose group. On the other hand, perceived price fairness affected booking intention for those in the hedonic trip purpose group but not in the utilitarian trip purpose group. These results empirically distinguished perceived price unfairness from perceived price fairness, revealing that they

operate differently. Therefore, it is reasonable to doubt that bipolar continuum scales are appropriate to use in measuring perceived price unfairness.

This study found that, for consumers who had a utilitarian purpose, price increases did not have a significant effect on either their perceived fair price or WTP, unlike for consumers who had a hedonic purpose. When consumers look for a hotel for utilitarian purposes, they might have a consistent level of perceived fair price and WTP that are not affected by a hotel's offered price. In contrast, when consumers look for a hotel for hedonic purposes, although these consumers may perceive a certain level of price increases as being unfair, their perceived fair price will be adjusted by a hotel's offered price. If consumers desire to stay at a hotel for a hedonic purpose, they may add the value of a hedonic situation to a hotel stay, so they are willing to pay a premium to book a hotel room.

In a real situation, it may be hard for hotel managers to identify consumers' perceived price unfairness through analysis of the hotel's booking system because the hotel may be fully booked by consumers who have begrudgingly booked their rooms and paid extra or by consumers who perceive the price increases to be fair. As Figure 2.4 illustrates, there were still a certain number of consumers who perceived the price increases to be fair, but they were not the majority. During high demand periods, a limited number of hotel rooms would likely be booked by some consumers who perceive the price increases to be fair, while others would be occupied by consumers who booked begrudgingly. Thus, in a real business situation, hotel managers may not need to pay attention to consumers' perceived price unfairness because their hotel rooms would be fully booked anyway.

Additionally, we tested fair price and WTP for exploratory purposes. In Figure 2. 6, consumers' perceived fair price in a utilitarian context was $122.06, while their perceived price was $135.49 in a hedonic context. These perceived fair prices in each situation can be represented as the range of the perceived fair price in each situation. Thus, hotels could increase room rates up to $22.06 in a utilitarian situation and up to $35.49 in a hedonic situation without any concern about consumers' perceived price unfairness.

2.6.2 Theoretical and Practical Implications

Despite the important role that external events play in hotel pricing, the situational context has not been highlighted in research on perceived price fairness in hotels' dynamic pricing. Therefore, this study clearly provides an important theoretical contribution to the literature in that it includes situational contexts within perceived price fairness research. This study shows that consumers who had a utilitarian purpose were more sensitive to perceived price fairness/unfairness than consumers who had a hedonic one, which is somewhat consistent with Wakefield and Inman's research findings showing that consumers with utilitarian motivation showed more price sensitivity (2003).

Further, unlike previous studies which used a continuum scale of perceived fairness and unfairness in one construct, this study measured perceived price unfairness and fairness separately and found differences between them in regards to both price increases and situational contexts. Another contribution of this research is our finding that perceived price unfairness did not influence consumers' WTP in hedonic situations.

Our exploratory research found that consumers did expect price increases in both hedonic and utilitarian situations. Consumers' perceived fair price without the price information was higher than when consumers were exposed to hotels' published price information, which reveals that a hotel's published price serves as an anchor in adjusting perceived prices down to a level lower than a hotel's published prices. The gap between expected fair price without price information and perceived fair price was related to hotels' published price. Also, consumers' WTP without price information and the WTP with price information were significantly different, indicating the hotel's published price affects consumers' WTP as well as perceived fair price.

The present study offers several practical implications for the hotel industry. First, findings of the study provide evidence of how consumers respond to hotel room rate increases in regard to their fairness/unfairness perceptions and behavioral responses depending on hedonic versus utilitarian situations. Consumers who are looking for a hotel room to enjoy participation hedonic events perceive the price increases as being less unfair than consumers who are looking for a hotel room as alternative housing. This finding suggests that hotel management might have more flexibility to increase room rates for consumers whose trip purpose is hedonic.

Second, the results show the difference in perceived fair prices between hedonic situation and utilitarian situations, indicating that consumers expect the room rate to be increased, on average up to $129 (from $100) for a hedonic situation and $118 (from $100) for a utilitarian situation. 10% of consumers in a utilitarian situation and 20% of consumers in a hedonic situation perceive price increases by $100 (from $100) as fair. This finding indicates that 10% and 20% of consumers in utilitarian and hedonic

situations, respectively, consider all price increases up to 100$ fair during high demand periods although the majority (80% -90%) of consumers find price increases unfair in at least some cases. Hotel revenue managers should consider increasing room rates appropriately to allocate the available rooms to consumers who consider room rate increases fair.

Third, the findings highlight the role of external events that add the value of hotel stay. When consumers plan to book a hotel for a particular event, the hotel room value is beyond the physical value (hotel room), adding the contextual value (Abrate & Viglia, 2016). Hotel operators and revenue management managers should fully apply dynamic pricing as a short-term tactic to respond to excessive demand caused by the external events and to allocate the hotel rooms to target consumers who are willing to pay a premium for a hedonic and a utilitarian purpose.

Fourth, hotels could be more cautious when increasing room rates in response to utilitarian situations (e.g., severe weather related event) (Wharton, 2012). It is critical for hotel revenue managers to manage potential perceptions of what might look like price gouging during high demand situations (Ponchione, 2012). In the case of severe weather situations, hotel managers should treat the situation as an emergency (AlBattat & Som, 2013). In this case, it is tough for hotel managers to deal with a massive number of guests who want to secure a hotel room as alternative housing due to severe weather as alternative housing. If hotels increase room rate rapidly in response to the immediate increase in demand, they may invoke consumer complaints (Thaler, 1985). However, if hotels with limited capacity offer affordable rates for the majority of people, they could have their rooms immediately fully booked or sold, but may lose many potential

consumers who would be willing to pay a higher price (Giberson, 2012; Meyer, 2006). Revenue management systems and managers must take these factors into account to enable hotels to match available rooms with the most valued guests.

The current study also provides practical implications for CVBs (Convention and Visitor Bureau) and local governments. Since CVB and local government receive financial benefits from hotel room tax (Litvin, Smith, & Blackwell, 2012), they essentially expect tax income increases when hotel room rates increase due to external events. It is vital for CVBs and local governments to actively create hedonic events to assist in the hotel industry in attracting more customers, increasing demand and thereby giving hotels a chance to increase room rates. Maintaining higher room rates during hedonic events could also help hotels keep higher reference prices, which assist hotel revenue managers in pricing room rates during low season as well (Viglia, Mauri, & Carricano, 2016).

2.6.3 Limitations and Recommendation for Future Studies

The current study is limited in terms of generalizability. First, this study manipulated a hedonic and a utilitarian situation using a sporting event and a weather-related event. However, no manipulation check was conducted. Future research would benefit from a manipulation check to enhance its validity. Second, this research was designed to test consumers' perceived price fairness for stays in a mid-scale hotel. Thus, it is not appropriate to apply the results of this research to upscale or luxury hotel situations. Third, the study respondents were from a fairly specific population: 90% of the respondents usually stayed at an economy hotel or a budget hotel. This may be

helpful for our research because our research target was mid-scale hotels; however, this information does limit the generalization of our research.

The current study employed a two-step measurements: 1) a forced binary scale to identify the direction (fair or unfair) and 2) an ordinal scale to capture the magnitude of perceived fairness and perceived unfairness separately. But this method may not be able to capture consumers' dual attitudes or mixed perceptions about price. We must take into account the possibility that people may perceive hotel room rate increases as reasonable while still perceiving any price increases as being unfair. It is therefore necessary to develop a more robust measurement model to capture full range of perceived fairness and perceived unfairness.

Finally, while this research found an effect of price increases in hedonic versus utilitarian situations on perceived price unfairness. The relationship between perceived price unfairness and behavioral responses needs further investigation. Many researchers have suggested that hotels' dynamic pricing may harm the long-term relationship between customers and hotels. However, the current research only measure short-term behavioral intentions. More research is needed to find out how consumers' perceived unfairness influences long-term customer behaviors.

CHAPTER 3. STUDY2: THE BIVARIATE NATURE OF PERCEIVED PRICE *UN*FAIRNESS

The following article will be submitted to the International Journal of Hospitality Management and is included here as chapter three in this non-traditional thesis/dissertation. This article is written in APA style format.

3.1 Abstract

Consumers' perceived price fairness is an important judgment when consumers evaluate a hotel's offered price and make the decision to book. Perceived fairness and unfairness have been conceptualized as being reciprocally activated and are often empirically tested using a binary or bipolar dimension(s) on a continuum scale(s). However, much of the literature believe there to be a conceptual distinction and asymmetric relationship between fairness and unfairness, casting doubt on the appropriateness of applying binary or a bipolar scale(s) to fair and unfair perceptions measurement. This research aims to show that bivariate measurements of perceived fairness and unfairness are more accurate than conventional bipolar measurements. The results present evidence for the independent operation of perceived fairness and unfairness and the stronger effect of perceived fairness on booking intentions than perceived unfairness. Results also suggest that consumers can have mixed perceptions of fairness and unfairness, not necessarily either fair or unfair. Lastly, the results indicate

fairness perceptions are the more powerful driver for booking intentions rather than unfair perceptions.

Key words: Perceived fairness, perceived unfairness, functional independence, booking intentions

3.2 Introduction

Price fairness perception is a human's judgment of whether a price or pricing process is reasonable, acceptable, or just (Bolton, Warlop, & Alba, 2003; Xia, Monroe, & Cox, 2004). It requires the activation of evaluative processes to compare a seller's price against a personal standard, reference, or norm (Xia et al., 2004). The activation of evaluative processes has traditionally been conceptualized as falling along a bipolar dimension (Cacioppo & Bernston, 1994). Price fairness perception has been predominately measured by bipolar scales from fair (positive evaluation) to unfair (negative evaluation) (Bolton et al., 2003; Vaidyanathan & Aggarwal, 2003; Xia et al., 2004) based on the assumption that negative and positive evaluative processes are reciprocally activated (Thurstone, 1929). For this reason, researchers have extensively employed bipolar measurement(s) in measuring human response to external stimulus (e.g., perception, emotion, attitude, behavior, etc.), including the measurement of consumers' price fairness perceptions.

However, many researchers insist that perceived fairness and unfairness are conceptually different due to negative dominance, and that negative evaluation of unfairness is clearer, sharper, and more concrete than positive evaluation of fairness (Adams 1963; Taylor & Fiske 1978; Kanouse 1984; Finkel, et al., 2001; Xia, et al., 2004;

Haws & Bearden 2006). Bipolar measurement is insufficient to represent comprehensively positive and negative evaluative processes (Cacioppo & Bernston, 1994; Cacioppo et al., 1997). In particular, bipolar measurement methods cannot sufficiently explain neutrality. Neutrality includes both indifference (a low level of both positive and negative evaluation) and ambivalent perceptions (both positive and negative evaluation) in bipolar measurement (Cacioppo & Bernston, 1994; Cacioppo et al., 1997).

One example of how neutrality may be forced and/or distorted in bipolar measurements of fairness and unfairness perceptions can be found in the influence of expectations and norms on consumers' perceptions. When a consumer plans to book a hotel to attend an event (e.g., professional football game), s/he may expect the room rate to be double the average room rate—$200 rather than $100, for instance—due to the event. If s/he finds a room rate of $160, how will s/he evaluate this price? The increased room rate of $160 can be considered as gain or as a loss, depending on whether s/he compares the rate to the average price of $100 or her/his expected price of $200. Prior to the 1990s, when the hotel industry implemented dynamic pricing, s/he would have compared the rate of the average price of $100, as the social norm of fairness (which outlines that any price increases driven by demand increases are considered unfair) was prevalent during that time period.

In more recent times, however, hotel consumers have become more familiar with and accepting of dynamic pricing (Kimes & Wirtz 2003; Wirtz & Kimes, 2007). Consumers conventionally expect hotel room rates to be dynamically driven by demand and dynamic pricing practices are considered to be normal business practice in the hotel industry (Farahmand & Chatterjee, 2008). In other words, with the repeated exposure to

the stimulus of dynamic pricing, the consumers' norm has changed (Kahneman & Miller, 1986). Does the change in norm necessarily mean that consumers' reaction to any price increase has also automatically changed? According to the norm theory, people may have both old and new norms; although a new norm has explicitly replaced an old norm, the old norm may have remained in memory (Kahneman & Miller, 1986; Wilson, et al., 2000). To revert back to the example above, s/he may accept price increases to $200 due to the football game based on business norms in the hotel industry, but at the same time, s/he may perceive it as unfair based on the social norm of fairness principle. Furthermore, as negative bias often dominates the human evaluative process (Bazerman, et al., 1995; Rozin & Royzman, 2001), it is likely that s/he may perceive the price increases as unfair in a bipolar measurement, thus manifesting the negative option.

The purpose of this study is to examine the bivariate structure of consumers' perceived fairness and unfairness evaluations and its effect on hotel booking intention. This research uses a scenario-based survey to manipulate hedonic (i.e., sporting event) and utilitarian (i.e., severe weather) event experimental situations. The present study assesses the effect of price increases on perceived fairness and unfairness independently. This study examines the impact of perceived fairness and unfairness on consumers' booking intentions and investigates the moderating effect of hedonic versus utilitarian situations on this relationship.

The empirical test of the bivariate structure of perceived fairness and unfairness yields important theoretical and managerial implications. Theoretically, this study contributes to the scholarly work on measurements of perceived fairness and unfairness by providing empirical evidence that perceived fairness and unfairness are

distinguishable and functionally independent. Further, this study suggests that bivariate measurements are superior to bipolar measurements of perceived fairness and unfairness to sufficiently measure consumers' whole perceptions of price fairness and unfairness. Finally, the results of this study, counterintuitive to more than a few owner-managers, suggest that hotel management might consider promoting consumers' perceived price fairness, rather than reducing perceived unfairness, to attract more consumers to book their hotel.

3.3 Literature Review

3.3.1 Price Fairness Perceptions Toward Hotels' Dynamic Pricing

Common social norms dictate that perceived price unfairness restricts firms' profit maximization (Kahneman et al., 1986; Kahneman & Miller, 1986; Kahneman, 1992). In their classic research in 1986, Kahneman and his colleagues proposed the principle of fair price, referred to as "dual entitlement," and applied this principle to the hospitality industry with the maxim, "[i]f you gouge them at Christmas, they won't be back in March" (Kahneman, Knetsch et al. 1986). Indeed, in the hotel industry, the initial implementation of dynamic pricing on revenue management was considered unfair by consumers in the 1990s (Kimes 1997). Nevertheless, dynamic pricing has been successfully implemented for hotel firms' revenue maximization, becoming both acceptable to consumers (Kimes & Wirtz, 2003) and a business norm for hotel management (Farahmand & Chatterjee, 2008).

Fairness judgments involved in price fairness perceptions require consumers to activate an evaluative process in which they compare an offered price with their multiple

reference points and norms (Kahneman 1992; Martins & Monroe, 1994; Monroe, 2003; Xia, Monroe et al., 2004). The change in consumers' normative attitude toward hotels' dynamic pricing and their reference points suggests an evolution in consumers' price fairness perceptions (Jone & Skarlick, 2012).

Although hotels' dynamic pricing is now considered a business norm, it may not completely replace the social norm of fairness held by consumers (Kahneman & Miller, 1986, Wilson, Lindsey, & Schooler, 2000). Let's recall the example of the football fan above. S/he expected that the hotel room rate would be doubled and found room rate increases of 60%. How does s/he judge the price fairness of the price increases? It is increased by 60%, which is less than an expectation of a 100% increase. S/he will judge this situation as either fair (compared to an expectation) or unfair (compared to the average price), or both fair and unfair (mixed perception). The offered price can be evaluated based on multiple reference points, without completely resolving the conflict between the gaps among the multiple reference points. As a consequence, the same level of price increases can be perceived both fair and unfair (Kahneman, 1992). The most important implication here is that the intermediate value that a consumer could select in a bipolar measurement is neutral (or as equally fair or unfair), which is not the consumer's true perception; such ambivalence is disregarded when we use binary or bipolar measurement.

Furthermore, binary or bipolar measurement presents the problem of negative bias. Consumer perceptions of price fairness have been predominantly measured on a continuum such as fair (extremely (very) unfair – extremely (very) fair), reasonable (extremely unreasonable – extremely reasonable), and acceptable (extremely

unacceptable – extremely acceptable) (Bolton et al., 2003, Vaidyanathan & Aggarwal, 2003). However, existing literature suggests that this scheme may result in an inaccurate representation of consumers' perceptions (Xia et al., 2004). Several researchers contend that perceived unfairness is conceptually different from perceived fairness because perceived unfairness is clearer and sharper; consumers are also better able to articulate the causal antecedents and consequences of perceived unfairness rather than perceived fairness (Haws & Bearden, 2006; Xia et al., 2004). Along similar lines of argument, Adams (1963) points out that the inequity concept is more critical than that of equity. Unfair situations are described as more salient (Kanouse, 1984) and more distinctly remembered (Taylor & Fiske, 1978) than fair ones. Unfair situations are more distinct for consumers because unfair events are phenomenologically associated with a sense of loss whereas fair events are associated with gains (Lupfer, et al., 2000). Therefore, the bivariate structure of perceived fairness and perceived unfairness is needed to resolve the limited capacity of bipolar measurement.

3.3.2 Bivariate Structure of Perceived Fairness and Unfairness

To understand the conceptual structure of perceived fairness and unfairness (positive and negative evaluation), it is necessary to look at the structure of evaluative space. The bivariate structure of positive and negative evaluative processes has been extensively studied in the field of psychology (Cacioppo & Bernston, 1994; Cacioppo et al., 1997; Norris, Gollan, Berntson, & Cacioppo, 2010). Both mixed emotions (Williams & Aaker, 2002) and dual attitudes (Wilson et al., 2000), suggest that the bivariate space of negativity and positivity represent human's evaluative process more comprehensively

than a bipolar continuum (Cacioppo & Bernston, 1994; Cacioppo et al., 1997). Although positive and negative evaluative processes have traditionally been conceptualized as being reciprocally activated, allowing the bipolar scale appropriate measurement of positive and negative judgment (Cacioppo & Bernston, 1994), positive and negative processes are not necessarily reciprocally activated but "can be activated reciprocally (e.g., mutually exclusive and incompatible), uncoupled (e.g., singularly activated), or non-reciprocally (e.g., co-activation or co-inhibitory; the principle of bivalent modes of evaluative activation)" (Cacioppo & Bernston, 1994, p. 402). In other words, positive and negative evaluative processes are distinguishable (functionally independent) and characterized by distinct activation functions.

The bivariate evaluative plan illustrated in Figure 3.1 demonstrates all combinations of positive and negative evaluative activation: a) the reciprocally activated high level of negativity and low level of positivity (implying perceived unfairness), b) the reciprocally activated high level of positivity and low level of negativity (implying perceived fairness), c) the non-reciprocally activated high level of positivity and high level of negativity (implying an ambivalent mode of perceived fairness and unfairness which reflects maximal conflict), and d) the non-reciprocally activated low level of both positivity and negativity (implying indifference). In the bipolar dimension, a) the non-reciprocally activated high level of positivity and negativity (ambivalent perceptions) and b) the non-reciprocally activated low level of positivity and negativity could be merged to a neutral point in the bipolar framework. Further, the combinations of non-mutually exclusive activations could not be measured by bipolar dimension(s).

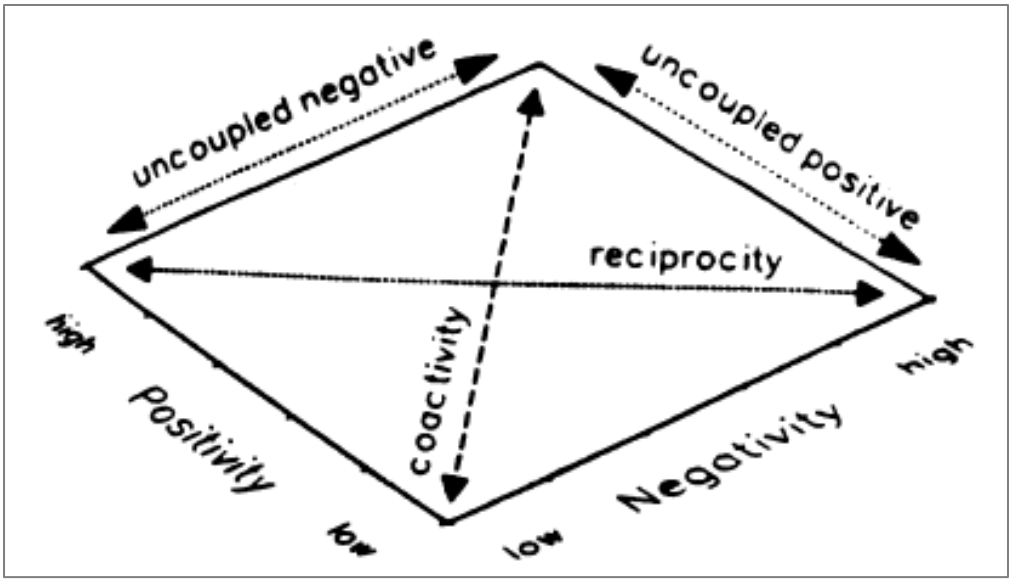


Figure 3.1 The Bivariate Evaluative Plane.

The left axis represents the level of excitatory activation of positive evaluative processes (labeled positivity) and the right axis represents the level of excitatory activation of negative evaluative processes (labeled negativity). Along each axis, the level of activity increases with movement away from the front axis intersection. The dotted diagonal extending from the left to the right axis intersections represents the diagonal of reciprocal control (labeled reciprocity). The dashed diagonal extending from the back to the front axis intersections depicts the diagonal of nonreciprocal control (labeled coactivity) and the arrows alongside the axes represent uncoupled changes in positive or in negative evaluative processing. These diagonals and axes and vectors parallel to them illustrate the major modes of evaluative activation.

Note. From "Relationship between attitudes and evaluative space: A critical review, with emphasis on the separability of positive and negative substrates." By J.T. Cacioppo and G.G. Berntson, 1994, Psychological Bulletin, 115, p. 402. Copyright © 1994 by the American Psychological Association.

If the positive and negative evaluative processes are not mutually exclusive but separable, a functional independence can be established (Cacioppo & Bernston, 1994). As discussed in the example for the ambivalent perceptions of fairness and unfairness due to hotels' transition toward dynamic pricing, we assume the superiority of bivariate measurement of positive and negative evaluative process, based on the conceptual foundations provided above, to hypothesize:

***H_1**. Perceived fairness and perceived unfairness are independent measurements.*

As mentioned above, bipolar measurement may contain inherent negativity dominance (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Rozin & Royzman, 2001). When positive and negative perceptions are co-activated, the stronger perceptions will dominate and be observed (Cacioppo et al., 1997). That is, when those who have ambivalent perceptions are asked to indicate their degree of positive and negative perceptions in a bipolar continuum, they may tend to choose a negative point (Cacioppo et al., 1997). In the bivariate measurement of perceived fairness and unfairness, this negativity bias will give weight to perceived unfairness. As a negative evaluative activation is steeper than the positive evaluative activation, the output in negative evaluative activation is larger than the output in positive evaluative activation. Therefore, we hypothesize:

***H_2**. The effect of price increases is stronger on perceived unfairness than on perceived fairness.* $|\beta_{PI \rightarrow PUF}| > |\beta_{PI \rightarrow PF}|$

***H_3**. The effect of perceived unfairness on booking intentions is stronger than the effect of perceived fairness on booking intentions.* $|\beta_{PUF \rightarrow BI}| > |\beta_{PF \rightarrow BI}|$

3.3.3 Hedonic vs. Utilitarian Situation

External events such as sporting events, mega events, cultural events, and disaster-related events (e.g., severe weather, airplane crashes, etc.) frame consumer

motivations to book a hotel room. For example, when a sports fan plans to travel and book a hotel stay with intentions to enjoy a game (hedonic situation), s/he is acting upon a hedonic motivation. However, during a severe weather related event, consumers may have a utilitarian motivation in seeking a hotel room as a form of alternative housing. And such situational contexts impact consumers' responses to price increases (Monroe, 2003; 2012). Wakefield and Inman (2003) found that consumers with hedonic motivations tended to have less sensitivity to price and might pay extra for a product or service (Hirschman & Holbrook, 1982). On the other hand, consumers with utilitarian motivations were more sensitive to price (Wakefield & Inman, 2003) and were thinking more rationally when they made purchasing decisions (i.e. hotel booking). Similarly, consumers may have a different level of perceived price value for a hotel stay. In the same vein, it is likely that the relationship between perceived price fairness/unfairness and booking intentions could be moderated by a hedonic or a utilitarian situation.

H_4. *Hedonic vs. Utilitarian situations significantly moderate perceived fairness, perceived unfairness, and booking intentions.*

> ***H_{4a}:*** *The impact of price increases on perceived fairness differs depending on the hedonic vs. utilitarian situation.* ($\beta_{\text{Hedonic: PI}\rightarrow\text{PF}} \neq \beta_{\text{Utilitarian: PI}\rightarrow\text{PF}}$)
>
> ***H_{4b}:*** *The impact of price increases on perceived unfairness differs depending on the hedonic vs. utilitarian situation.* ($\beta_{\text{Hedonic: PI}\rightarrow\text{BI}} \neq \beta_{\text{Utilitarian PI}\rightarrow\text{BI}}$)
>
> ***H_{4c}:*** *The impact of perceived fairness on booking intentions differs depending on the hedonic vs. utilitarian situation.* ($\beta_{\text{Hedonic: PF}\rightarrow\text{BI}} \neq \beta_{\text{Utilitarian: PF}\rightarrow\text{BI}}$)

H_{4d}: *The impact of perceived unfairness on booking intentions differs depending on hedonic vs. utilitarian situation.* ($\beta_{\text{Hedonic: PUF} \rightarrow \text{BI}} \neq \beta_{\text{Utilitarian PUF} \rightarrow \text{BI}}$)

3.4 Methodology

3.4.1 Measurements

A scenario experiment was used to manipulate experimental situations. The questionnaire consisted of four sections. The first section assessed the participant's hotel booking experiences (i.e. frequency of hotel booking experience within the past year, internet booking experience, familiarity with hotel's dynamic pricing, etc.) to facilitate the respondents' recall of their hotel booking experiences. In the second section, the respondents were randomly assigned to one of two situational scenarios: planning to book a hotel for a sporting event vs. planning to book a hotel due to a severe weather-related event (Table 3.1).

After reading the randomly assigned scenario, participants were asked to indicate the level of perceived hedonic and utilitarian value of a hotel stay in the given situation. These questions used hedonic and utilitarian measurement items (Voss, Spangenberg, & Grohmann, 2003) to confirm if the given scenarios successfully represented a hedonic versus a utilitarian situation.

Table 3.1 Scenario Description

Scenario 1: Sporting event (Hedonic situation)

- Imagine that you were planning a trip to watch your favorite professional sports teams play. You were planning to stay in a hotel for the game night. You found a 3-star hotel that satisfied your needs.
- Typically, you know that the average room rate for this type of hotel is $100.
- Due to the football game, all hotels were expected to be fully booked on the game night.

Scenario 2: Weather related event (Utilitarian situation)

- Imagine that your neighborhood area was flooded and had a power outage due to a storm. You are planning to stay in a hotel for the night as an alternative housing. You found a 3-star hotel that satisfied your needs.
- Typically, you know the average room rate for this type of hotel is $100.
- Due to the storm, all hotels were expected to be fully booked for the night of your stay.

Once participants presented their level of perceived hedonic vs. utilitarian value in the given situation, they were asked to indicate their internal reference price. Based on the "range theory," each participant was asked to provide his/her reference prices: 1) for fair price, "what hotel room price would you consider fair in this given situation?" and 2) for WTP (willing to pay), "what is the highest rate you would be willing to pay under the described circumstance?" Then, each participant was randomly assigned one of the sequential scenarios regarding the magnitude of room rate increases ($20/$40/$60/$80/$100) and was asked to indicate their level of fairness perceptions in the given situation, each with four measurement items: reasonable, acceptable, fair, and justifiable. (Bolton, Warlop, & Alba, 2003).

After measuring their level of fairness perceptions, the subjects were asked to recall the given scenario situation and to indicate the correct situation to ensure the

subject correctly envisioned themselves in the manipulated situation. This validation question was employed to minimize the carry-over effect of prior perceptions fairness questions remaining in their memory and reduce the common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012). After the validation question, the subjects were asked to indicate their perceptions level of unfairness with four measurement items: unreasonable, unacceptable, unfair and unjustifiable. We avoided using bipolar continuum scales and instead used two different measurement constructs: fairness perceptions and unfairness perceptions using a 7-Likert scale (Strongly Disagree – Strongly Agree).

The final section assessed the participant's demographic variables (i.e. gender, age, education, marital status, annual household income, and employment). At the end of the survey, we added a question to verify whether each respondent fully understood the given situation. If a respondent chose the wrong answer, we assumed that the respondent was not qualified to participate in the project, and their answers were eliminated.

3.5 Results

3.5.1 Respondents' Profiles

A total of 761 surveys were collected from Internet survey panels. Of the respondents, 729 reported that they had experienced and were familiar with hotel's dynamic pricing practice. We chose only these respondents for the data analysis. Among those respondents, outliers were retained as outliers reflect the random variability inherent in a randomized assignment.

Table 3.2 Respondents' Demographics (N=729)

Characteristics	Freq.	Percent	Characteristics	Freq.	Percent
Gender			**Marital Status**		
Male	399	54.81%	Married	289	39.64%
Female	329	45.19%	Single	398	54.60%
			Other	42	5.76%
Age			**Total annual household income**		
18-20	8	1.1%	Less than $20,000	165	22.63%
21-30	305	42.84%	$20,001 - $40,000	222	30.45%
31-40	239	32.78%	$40,001 – $60,000	170	23.32%
41-50	88	12.07%	$60,001 – $80,000	86	11.80%
51-60	62	8.50%	More than $80,001	86	11.80%
61-	27	3.70%			
Education			**Employment**		
High School or equivalent	176	24.14%	Part-time employed	171	23.49%
2-year college degree	166	22.77%	Full-time employed	431	59.20%
4-year college degree	294	40.33%	Unemployed	61	8.38%
Graduate / Professional degree	93	12.86%	Retired	22	3.02%
			Homemaker	31	4.26%
			Others	12	1.62%

Note: Insignificant level of χ^2 indicates the homogeneity of sample distribution in each group

Table 3.2 shows the respondents' demographics and profiles. Among the 729 valid respondents, 54.81% are male, and 45.19% are female. The average age of respondents is 35.13 years old with the ages ranging from 18 to 73. The average annual household income levels indicate that 76.41% of respondents have an annual household income of $60,000 or less, and 23.59% have an annual income over $60,000. The sample includes 43.82 % of respondents who have a high school or associate's degree and 56.18% with a bachelor's degree or higher. 3.98% of respondents have not stayed at a hotel in the past 12 months, 75.17% of respondents have stayed at a hotel 1 to 4 times in the past 12 months, and 20.85% of respondents have stayed at a hotel more than five

times in the past 12 months. 1.51% of respondents usually stay in one-star hotels, 6.88% of respondents tend to stay in two-star hotels, 56.81% in three-star hotels, and 34.60 % of them primarily stay in four or five-star hotels. Most respondents (99.45%) have used the Internet to book a hotel.

3.5.2 Manipulation Check: Hedonic vs. Utilitarian Situation

We compared the mean values of participants' perceptions of the level of hedonic vs. utilitarian value between groups for the sporting event and the weather related event. Because the hedonic group exhibits a significantly higher perceived level of hedonic value ($\mu_{hedonic} = 4.609$, $\mu_{utilitarian} = 3.156$ $\Delta\mu = 1.453$, $t = 14.226$ ($df = 727$), $p<0.001$) and the utilitarian group a significantly higher perceived level of utilitarian value ($\mu_{utilitarian} = 5.736$, $\mu_{hedonic} = 5.221$, $\Delta\mu = 0.515$, $t = 6.321$ ($df = 727$), $p<0.001$), we concluded that our treatments had the intended effect.

3.5.3 Bivariate Measurement of Price Fairness Perceptions

According to the principle of bivariate modes of evaluative activation, positively and negatively evaluative functions are not necessarily reciprocally activated but can be activated either reciprocally (e.g., mutually exclusive and incompatible) or non-reciprocally (e.g., co-activated or indifferent) (Cacioppo & Berntson, 1994). The scatter plot of perceived fairness and unfairness depicted in Figure 3.2 provides an interesting alternative perspective on the distribution of perceived fairness and unfairness. If perceived fairness and unfairness are reciprocally activated and measured by bipolar scales, only reciprocal outcomes (fair-neutral-unfair) are considered as meaningful, and

subjects who did not fall in the line of reciprocity should be considered as "statistical errors." Accordingly, we do not disregard these as “statistical errors” in the bivariate distribution.

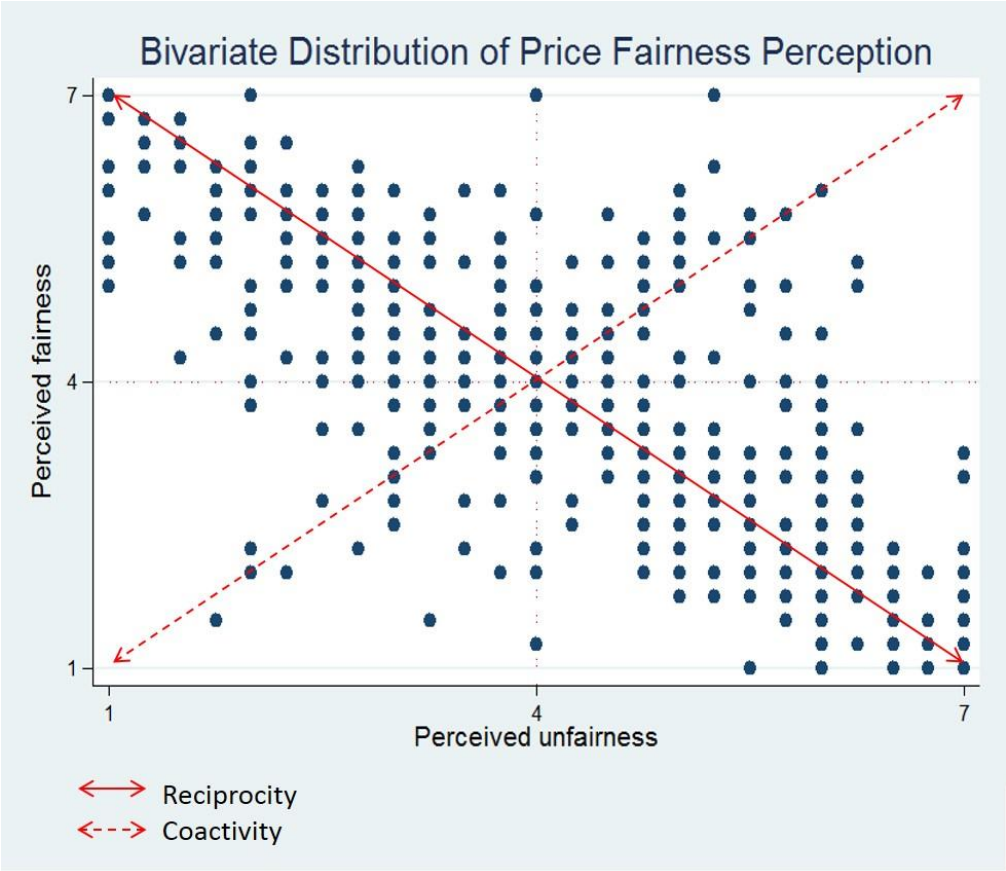


Figure 3.2 Bivariate Structure of Price Fairness Perceptions

As Figure 3.2 demonstrates, subjects evaluate the given situation as 1) fair and less unfair (top left area), 2) fair and unfair (right top), 3) less fair – less unfair (left bottom), and 4) unfair and less fair (right bottom). These four modes of the evaluative process for price fairness can be categorized as 1) fair group, 2) ambivalent mode of fair and unfair, 3) indifferent group, and 4) unfair group, respectively. As the bivariate

evaluative plane (Figure 3.1) suggests, the scatter plot of perceived fairness and unfairness (Figure 3.3) demonstrates that when consumers evaluate a hotel room's price, they can have 1) reciprocally activated fair and less unfair perceptions, 2) non-reciprocally co-activated both fair and unfair perceptions, 3) low level of both fair and unfair perceptions, and 4) reciprocally activated unfair and less fair perceptions of the same stimulus. This is evidence that bivariate measurement of perceived fairness and unfairness is superior to bipolar measurement, which does not capture co-activated (mixed) perceptions of fairness and unfairness. Furthermore, it shows that neutrality in bipolar scales indeed represents co-activated perceptions (Cacioppo & Bernston, 1994).

Table 3.3 Distribution of Consumers' Price Perceptions

N= 729	Hedonic situation					Utilitarian situation				
Freq. (%)	+$20	+$40	+$60	+$80	+$100	+$20	+$40	+$60	+$80	+$100
Fair	62 (80.5%)	47 (63.5%)	30 (38.5%)	11 (16.2%)	11 (16.88%)	44 (57.9%)	20 (27.8%)	18 (25.0%)	13 (17.8%)	5 (7.1%)
(Co-activated) Ambivalent	7 (9.1%)	5 (6.5%)	6 7.8%)	13 (16.9%)	7 (9.1%)	8 (10.5%)	9 (12.5%)	9 (12.5%)	4 (5.5%)	5 (7.1%)
(Co-activated) Indifference	6 (7.8%)	7 (9.1%)	11 (14.3%)	9 (11.7%)	7 (9.1%)	10 (13.2%)	15 (20.8%)	9 (12.5%)	11 (15.1%)	9 (12.9%)
Unfair	2 (2.6%)	15 (20.3%)	31 (39.7%)	35 (51.5%)	44 (63.8%)	14 (18.4%)	28 (38.9%)	36 (50.0%)	45 (61.6%)	51 (72.9%)
Total	77	74	78	68	69	76	72	72	73	70

Note: Kruskal-Wallis Test: Hedonic group: $\chi^2_{(df=4)} = 90.50$; $p < 0.001$, Utilitarian group: $\chi^2_{(df=4)} = 55.74$; $p < 0.001$

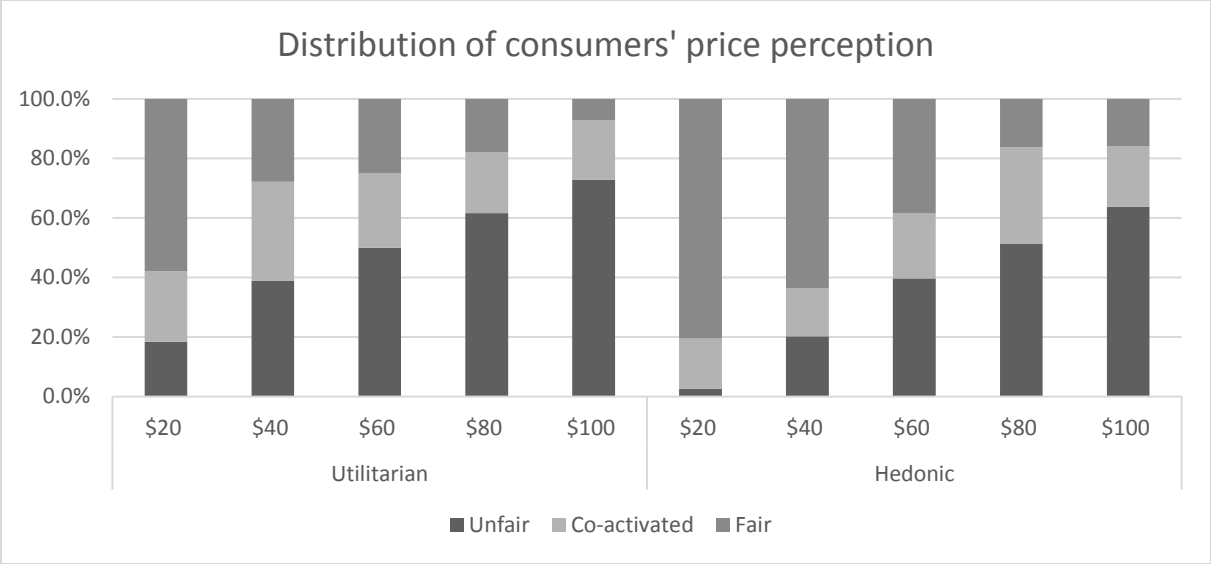


Figure 3.3 Structure of Perceived Unfairness/Fairness in Each Group

3.5.4 Measurement Model

3.5.4.1 Overall Measurement Model

Based on Anderson and Gerbing's (1988) two-step approach, a measurement model using Stata ® 13 was estimated before the structural model. A confirmatory factor analysis (CFA) was first conducted to assess the measurement model and to test reliability, construct validity, and convergent validity. All standardized factor loadings of each construct are high, ranging between 0.892 and 0.972, which ensures the measurement has convergent validity. All Cronbach's alpha values as well as composite reliability values are above 0.9, ensuring internal consistency.

Table 3.4 Standardized Confirmatory Factor Analysis Properties and Reliability

Factors	Factor Loading	Cronbach α	Composite Reliability
Perceived Price Fairness		.967	.974
Reasonable	.960		
Acceptable	.965		
Fair	.922		
Justifiable	.878		
Perceived Price Unfairness		.968	.947
Unreasonable	.964		
Unacceptable	.972		
Unfair	.917		
Unjustifiable	.887		
Booking Intentions		.957	.958
Willing to book	.906		
Would like to book	.951		
Will book a room	.964		

As shown in Table 3.5, the average variance extracted (AVE) values from two constructs exceed the cut-off criterion of 0.5, and are greater than the squared correlations of perceived price unfairness and perceived price fairness. This proves the measurement has convergent validity and discriminant validity. The CFA on three latent variables (perceived fairness, perceived unfairness, and booking intentions) with eleven observed variables shows the goodness-of-fit indices (χ^2 =219.96, df=38, p< 0.01), root mean square error of approximation [RMSEA] = .080, comparative fit index [CFI] = .985, and Tucker-Lewis Index [TLI] = .978. Since these measurement model fit indices suggest a

good model fit, we can conclude that perceived price fairness and perceived price unfairness are independent measurement constructs. Therefore, H_1 is supported.

Table 3.5 Measured Correlations, Squared Correlations, and Average Variance Extracted (AVE)

	PPF	PPUF	BI
Perceived Price Fairness	1.00		
Perceived Price Unfairness	-.842**		
		1.00	
(squared correlations)	(.598)		
Booking Intentions	.764**	-.706	
			1.00
(squared correlations)	(.583)	(.498)	
AVE	.881	.857	.885
Mean	3.795	4.190	4.074
SD	1.756	1.844	1.794

Note: ** $p< 0.01$ * $p<0.01$
Model Measurement Fit: χ^2 =219.96, *df* =38 ($p< 0.01$), Root Mean Square Error of Approximation [RMSEA] = .080, Comparative Fit Index [CFI] = .985, Tucker-Lewis Index [TLI] = .978
AVE = Sum of squared standardized loading / (Sum of squared standardized loading + sum of indicator measurement error)
Composite reliability = Squared sum of loading / (squared sum of loading + sum of indicator)

3.5.4.2 Test for invariance comparing hedonic and utilitarian situations

A measurement invariance test was conducted to verify invariance across hedonic and utilitarian situations (Acock, 2013). A non-constraint model for hedonic and utilitarian situations was assessed and compared to the full-metric invariance model for the two situations. The results of the measurement invariance test are summarized in Table 3.6. The results demonstrate that the chi-square difference of likelihood-ratio test

between the constraint invariance model and the full-metric invariance model is insignificant, ensuring that our proposed model is valid for both hedonic and utilitarian situations.

Table 3.6 Test for Metric Invariance Comparing for Hedonic and Utilitarian Situations

Model	χ^2(df)	RMSEA	CFI	TLI	Δ^2
Constraint model	303.14(76)	0.091	0.981	0.973	12.23(8) P >0.05 (NS)
Full metric model	315.38(84)	0.087	0.981	0.975	

3.5.4.3 Measurement Model Comparison

The additional model comparison was conducted to ensure that our proposed bivariate measurement model is better than other single “fairness perception” or “unfairness perception” models. The results show that the chi-square differences between the proposed model and the fairness only model (Δ^2=116.27(26) p<0.001) and between the proposed model and the unfairness only model (Δ^2=136.48(26) p<0.001) are significant, confirming that our proposed model is better than "fairness perception" only and "unfairness perception" only models.

Table 3.7 Measurement Model Comparison

	Bivariate (proposed)	Fairness only	Unfairness only
Chi-Square (df)	219.96 (38)	103.69 (12)	83.48(12)
	p < 0.0001	*p <0.0001*	*p<0.0001*
RMSEA	0.08	0.102	0.090
CFI	0.985	0.987	0.990
TLI	0.978	0.977	0.982
R^2	0.999	0.995	0.996

Note:

Δ^2 (between the proposed model and fairness only model) = 116.27(26) p<0.0001

Δ^2 (between the proposed model and unfairness only model) = 136.48(26) p<0.0001

3.5.5 Structural Equation Model

A structural equation model using Stata® 13 estimated the relations among price increases, perceived fairness, perceived unfairness, and booking intentions (Figure 3.4). The global fit indices indicate a goodness-of-fit statistic (χ^2 =251.67, *df*=46, *p*< 0.0001, RMSEA= 0.078, CFI =0.984, TLI = 0.976) with independent measurements of perceived unfairness and perceived fairness.

In the line with H_2, the Steiger's Z- test was used to test the significance of the differences in coefficients of price increases on perceived fairness and perceived unfairness, as suggested by Meng, Rosenthal et al. (1992). Price increases were expected to be powerfully associated with perceived unfairness (β = .512) than with perceived fairness (β = -.507) but the Steiger's Z = 0.14 (p>0.05) shows the difference is insignificant. Thus, H_2 is not supported. Regarding the test for H_3, the results were

opposite of our hypothesis. The effect of perceived fairness on booking intentions ($\beta_{PF \rightarrow BI}$ = .602) is stronger than the effect of unfairness on booking intentions ($\beta_{PUF \rightarrow BI}$ = -.143) (z = 10.52, p<0.001). Thus, H_3 is not supported.

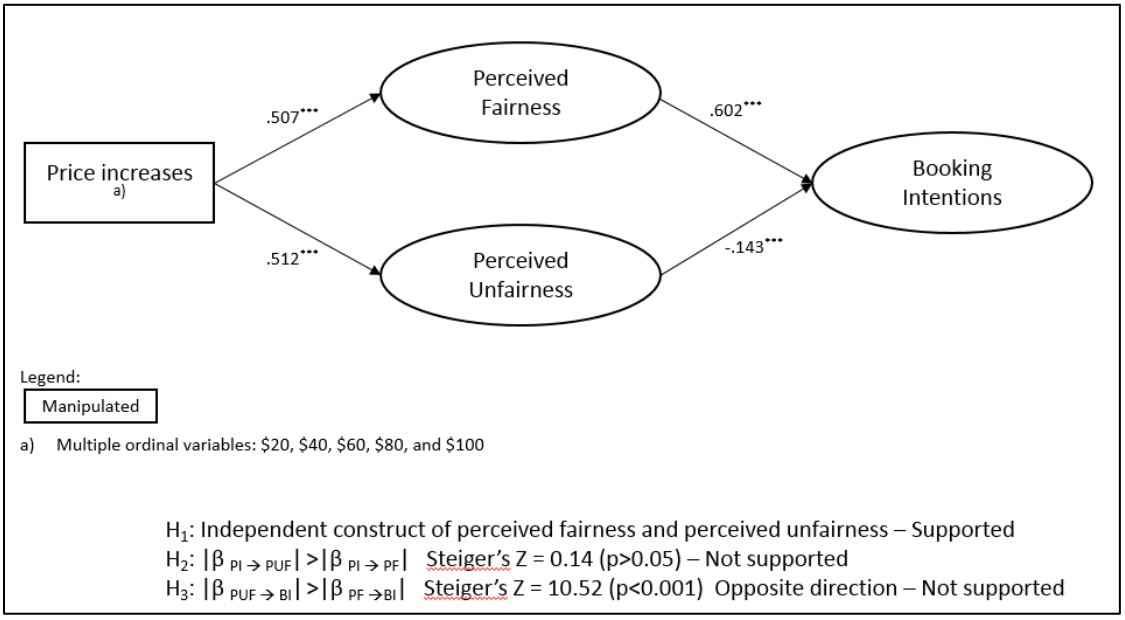


Figure 3.4 Structural Model

*** *p <0.001*

Goodness-of-fit statistics: χ^2 =251.67 (*df*=46, *p*< 0.001), RMSEA= 0.078, CFI =0.984, TLI = 0.976)

The group comparison model fit indices indicate a good model fit (χ^2 =405.33, *df*=111, *p*< 0.001, RMSEA= 0.085, CFI =0.976, TLI = 0.972) and the group model is significantly different from overall model ($\Delta \chi^2$ = 153.66(65), p<0.001), showing that the hedonic and utilitarian situations have an interaction effect on the relationship among price increases, perceived fairness, perceived unfairness and booking intentions. However, the effect of price increase on both perceived price fairness ($\chi^2(1)$ = 0.576,

$p>0.05$) and perceived price unfairness ($\chi^2(1) = 0.238$, $p>0.05$) was not significantly moderated by the situation. Thus, H_{4a} and H_{4b} are not supported.

The hedonic and utilitarian situations show marginally different levels in the relationship between perceived fairness and booking intentions ($\beta_{Hedonic:PF\rightarrow BI} = .560$, $p<0.001$; $\beta_{Uedonic:PF\rightarrow BI} = .624$, $p<0.001$; $\Delta\beta = .064$, $\chi^2(1) = 3.753$, $p=0.052$). The situation significantly moderates the relationship between perceived unfairness and booking intentions ($\beta_{Hedonic:PUF\rightarrow BI} = .229$ $p<0.001$; $\beta_{Utilitarian:PUF\rightarrow BI} = .113$ $p<0.001$; $\Delta\beta = .064$, $\chi^2(1) = 5.486$, $p<0.05$), implying that the hedonic and utilitarian situations moderate the relationship between perceived fairness and booking intentions and the relationship between perceived unfairness and booking intentions. Thus, H_{4c} and H_{4d} are supported.

Table 3.8 Results of SEM and Group Comparison

	Overall	Group comparison model		Difference
χ^2 (*df*)	251.673 (46) *p < 0.001*	405.34 (111) *p <0.001*		153.667 (65) *p <0.0001*
RMSEA	0.078	0.085		
CFI	0.984	0.976		
TFI	0.976	0.972		
		Hedonic	Utilitarian	Group invariance: χ^2 (*df*)
PI → Fair [1)]	-.507***	-.517***	-.516***	0.576(1), NS
PI → Unfair [2)]	.512***	.505***	.541***	0.238(1), NS
PI → BI	-.180***	-.156***	-.172***	0.701(1), NS
Unfair → BI [3)]	-.143**	-.228***	-.113	5.486(1), *p<0.05*
Fair → BI [4)]	.602***	.560***	.624***	3.753(1), *p=0.052*
R^2 (Unfairness)	.262	.267	.267	
R^2 (Fairness)	.257	.255	.293	
R^2 (BI)	.699	.738	.682	

Note. *** *p<0.001* ** *p<0.01,* * *p<0.05,* + *p<0.1, NS: insignificant*

1) H^{4a} is not supported
2) H^{4b} is not supported
3) H^{4c} is supported
4) H^{4d} is supported

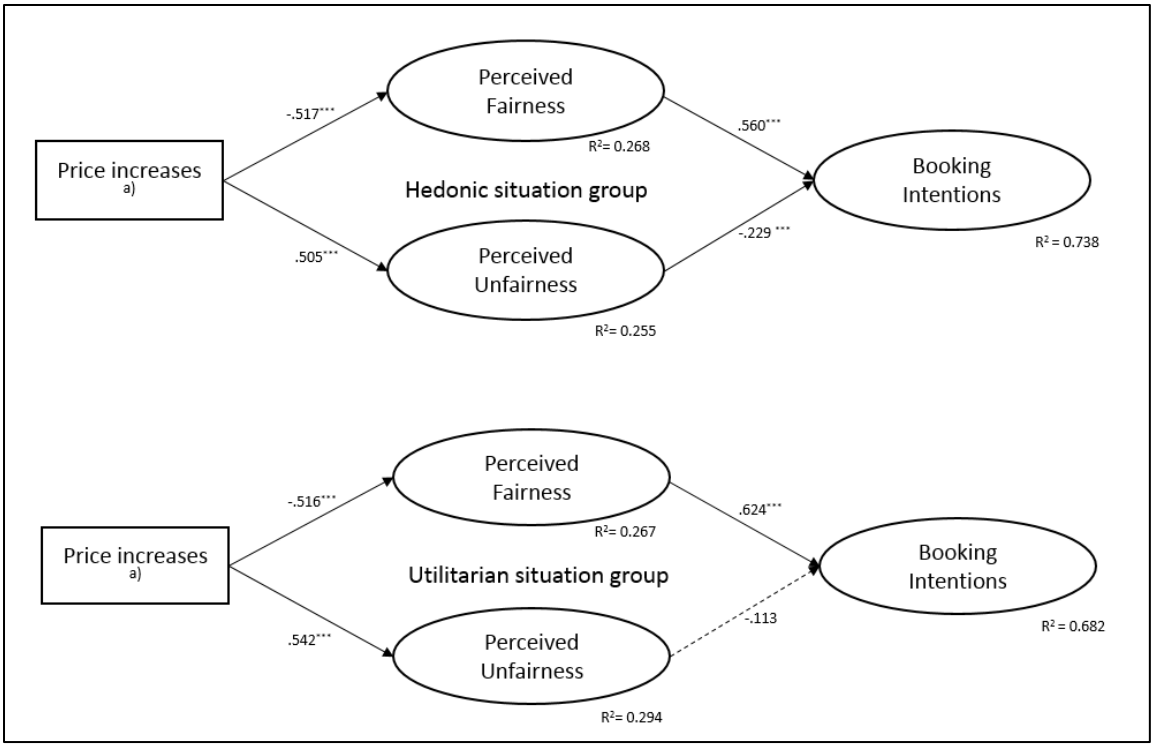


Figure 3.5 The Results of SEM

***p<0.001, **p<0.01

Note: a) Price increases are manipulated variables ($20/$40/$60/$80/$100) and coded as ordinal.

Table 3.9 Hypothesis Results

	Hypothesis	Results
H_1	Perceived fairness and perceived unfairness are independent measurements.	Supported
H_2	The effect of price increases is stronger on perceived unfairness than on perceived fairness. $\lvert\beta_{PI \rightarrow PUF}\rvert > \lvert\beta_{PI \rightarrow PF}\rvert$	Not supported
H_3	The effect of perceived unfairness on booking intentions is stronger than the effect of perceived fairness on booking intentions. $\lvert\beta_{PUF \rightarrow BI}\rvert > \lvert\beta_{PF \rightarrow BI}\rvert$	Not supported
H_4	Hedonic vs. Utilitarian situations significantly moderate perceived fairness, perceived unfairness, and booking intentions.	Supported
H_{4a}	The impact of price increases on perceived fairness differs depending on the hedonic vs. utilitarian situation. $\beta_{\text{Hedonic: PI}\rightarrow\text{PF}} \neq \beta_{\text{Utilitarian: PI}\rightarrow\text{PF}}$	Not supported
H_{4a}	The impact of price increases on perceived unfairness differs depending on the hedonic vs. utilitarian situation. $\beta_{\text{Hedonic: PI} \rightarrow \text{BI}} \neq \beta_{\text{Utilitarian PI} \rightarrow \text{BI}}$	Not supported
H_{4c}	The impact of perceived fairness on booking intention differs depending on the hedonic vs. utilitarian situations. $\beta_{\text{Hedonic: PF} \rightarrow \text{BI}} \neq \beta_{\text{Utilitarian: PF} \rightarrow \text{BI}}$	Supported
H_{4d}	The impact of perceived unfairness on booking intentions differs depending on hedonic vs. utilitarian situation. $\beta_{\text{Hedonic: PUF} \rightarrow \text{BI}} \neq \beta_{\text{Utilitarian PUF} \rightarrow \text{BI}}$	Supported

3.6 Conclusions

3.6.1 Discussion

This study empirically examined the bivariate structure of consumers' perceived fairness and unfairness and its effect on hotel booking intentions. A scenario survey was used to manipulate experimental situations of hotel room rate increases during excess demand events such as sporting events (hedonic situation) and severe weather-related events (utilitarian situation).

The CFA results confirm the functional independence of perceived price fairness and unfairness (H_1**)**. The test for metric invariances ensures that the bivariate model is valid for both hedonic and utilitarian situations. The SEM results indicate that the effect of price increases on (-) perceived price fairness and (+) unfairness is not different (H_2). This result rejects the common notion that perceived unfairness is clearer and steeper than perceived fairness. The results show that price increases reciprocally affect both perceived fairness and unfairness. Interestingly, the results reveal that perceived fairness has a stronger effect on booking intentions than perceived unfairness, thus rejecting our hypothesis (H_3) that perceived unfairness will have stronger effect on booking intentions. The rejection of this hypothesis disrupts the long-held notion that "losses loom larger than gains" and questions the weight given to negative evaluative judgment as the stronger predictor of behavioral responses insisted on in many existing investigations (Xia et al., 2004). Due to negative dominance, perceived unfairness is generally considered to be the stronger response to price increases; however, our results contradict that logic.

The results of this study open doors to provocative interpretations. First, it suggests that the bivariate structure of perceived fairness and unfairness can reduce an apriori assumed negative dominance. Negative dominance is defined as "the combination of negative and positive entities yield evaluations that are more negative than the algebraic sum of the subject of individual subjective valences would predict (Rozin & Royzman, 2001, p. 296)." In a bipolar dimension, people lean toward the negatively dominant point to be more likely to choose the "unfair" rather than "fair" option if they have ambivalent perceptions. The bivariate measurement of fairness and unfairness captures the subjects' positive and negative entities independently, which can reduce negative dominance in measuring both fairness and unfairness perceptions. In other words, the bivariate measurement captures the non-biased and combination of negative and positive perceptions.

This result is supported by the positivity offset illustrated by Cacioppo et al. (1997) as "the motivation to approach is stronger than the motivation to avoid (p. 12)." Accordingly, perceived fairness (positive evaluation) has a stronger effect on booking intentions (positive behavior). The positivity offset reveals a difference in the transfer functions for positivity and negativity that would not be captured if positivity and negativity were measured by a single bipolar continuum (Cacioppo et al., 1997).

Second, the test for metric invariances for group comparison reveals that hedonic and utilitarian situations moderate the impact of price increases on perceived fairness and perceived unfairness as well as the impact of perceived unfairness on booking intentions. Surprisingly, it was also found here that perceived unfairness does not impact booking intentions in the utilitarian situation. As described above, perceived fairness rather than

perceived unfairness has stronger impacts on booking intentions in both situations, even more so in the utilitarian situation where perceived unfairness had no significant effect on booking intentions. It should be noted that this result does not mean that perceived unfairness is not an important factor for consumers in booking a hotel room in utilitarian situations. In fact, there might be consumers who perceive hotel room rates as unfair but nevertheless book a room during excess demand events, such as severe weather.

3.6.2 Implications

The empirical test of the bivariate structure of perceived fairness and unfairness yields important theoretical and managerial implications. Theoretically, this study contributes to the scholarly work on the measurement of perceived fairness and unfairness by providing empirical evidence that perceived fairness and unfairness are distinguishable and functionally independent. Further, this study suggests that a bivariate measurement is as, appropriate, likely more, than any bipolar measurement of perceived fairness and unfairness. Consumers may possess ambivalent perceptions of price fairness and unfairness. A bivariate measure aids in understanding the full range of consumers' perceived fairness and unfairness. Furthermore, a bivariate measurement of perception allows researchers to find the effect of fairness and unfairness on consumers' behavioral responses separately.

The study also has major implications for managerial practice. First, the results show that hotel managers should consider perceived fairness and perceived unfairness separately, and be aware of the fact that consumers may have both fair and unfair judgments regarding hotel pricing. Accordingly, many consumers have fair and unfair

and less fair and less unfair perceptions at the same time when searching for a hotel. Hotel room rate increases are negatively associated with consumers' perceived fairness and positively with unfairness. However, this study's findings suggest that consumers' perceived fairness is the more powerful driver in booking a hotel. Therefore, hotel management might consider promoting consumers' perceived price fairness rather than reducing perceived unfairness to attract more consumers to book.

Second, the current study identifies a not-significant relationship between perceived unfairness and booking intentions in the utilitarian situation. The result points out the unpredictable consequences of perceived unfairness. For hotel operators and managers, it would be easier to set room rates and operate the hotel business when they can predict demand. Hotel managers should keep in mind that although consumers may be willing to book a hotel room in spite of their unfairness perceptions, they might be unpleasant and unhappy when they visit the hotel. Hence in situations where consumers feel as if they have no choice but to book a hotel, the utilitarian situation, operators might be wise to consider this and make their stay as effortless and comfortable as possible.

Third, the non-significant relationship between perceived unfairness and booking intentions could be interpreted as allowing hotel operators to ignore consumers' unfairness perceptions during a utilitarian situation. According to Maxwell (2002), the relative power of the buyer and seller influences fair/unfair relationships. If consumers have alternative options, room rate increases might not tend to be perceived as unfavorably, or unfair. In these types of circumstances hotels might consider cooperating with local governmental and other public organizations and associations to accommodate

consumers' needs for alternative housing. Public shelters or Airbnb could easily expand a limited supply of hotel rooms during high demand in utilitarian situations.

3.6.3 Limitations

Several limitations of this study should be considered when interpreting the results for future studies. First, although this study pioneers an examination of the bivariate measurement for perceived fairness and unfairness in place of the traditional measurement using bipolar scales, terminology used in traditional measurement such as fair, reasonable, acceptable, justifiable for perceived fairness and unfair, unreasonable, unacceptable, unacceptable, and unjustifiable for perceived unfairness were used. Cacioppo et al. (1997) points out the need to minimize the possibility that participants may treat these unipolar scales as bipolar scales when using antonym pairs. To minimize the carry-over effect in the survey conducted for this study, participants were asked to recall the scenario situation before they were asked to indicate the magnitude of their unfairness perceptions. Nevertheless, the scales of perceived fairness and perceived unfairness were used in antonym pairs. This may have opened the possibility that participants treated these bivariate scales as bipolar scales. Therefore, future research should consider choosing the wording more carefully to clearly treat the study as one-dimensional bivariate scales rather than bipolar.

Second, this study manipulated experimental situations, a 3-star hotel visit to attend a sporting event and an equivalent hotel stay mandated by severe weather. Therefore, these results may be limited in their application to other hotel settings. Third,

this research did not include negative behavioral intentions such as negative word of mouth, complaint, cancellation of the plan, etc.

Lastly, individual characteristics and different levels of involvement in the experimental situations were not considered. Participants who were asked to consider a hotel stay because of a sports game but are not actually big fans of sports may have a lower given level of involvement while a sporting fan might have a stronger involvement. It is possible that different levels of involvement will have significant impact on perceived price fairness / unfairness and booking intentions. Future studies may extend these research findings by integrating personal variables (demographic and psychographics) and involvement factors that may reveal a different relationship between the research constructs.

CHAPTER 4. STUDY3: THE MODERATING ROLE OF INVOLVEMENT IN THE RELATIONSHIP AMONG PRICE INCREASES, PERCEIVED *UN*FAIRNESS, AND BOOKING INTENTIONS

The following article will be submitted to the International Journal of Hospitality Management and is included here as chapter three in this non-traditional thesis/dissertation. This article is written in APA style format.

4.1 Abstract

This research examines the moderating role of consumer involvement in the relationship among price increases, perceived price fairness and unfairness, and hotel booking intentions. The results revealed that low-involvement consumers are more sensitive to price increases but their price unfairness perceptions do not have significant effect on their booking intentions. Contrastingly, high-involvement consumers are less sensitive to price increases, but their price evaluation has more influence on their booking intentions. The findings practically imply that low-involvement consumers are easily affected by simple information on room rates, but their booking intentions are not predictable as high-involvement consumers' booking intentions. For both high- and low-involvement consumers, consumers' perceived price fairness is the stronger driver of booking intentions than perceived price unfairness. Therefore, hotel operators and

managers might consider promoting consumers' perceived price fairness rather than reducing perceived unfairness to attract more consumers to book.

Keywords: Involvement, perceived price fairness, perceived price unfairness, booking intentions

4.2 Introduction

Hotel revenue management (hereafter RM) refers to the strategy of allocating the right type of capacity to the right kind of customer at the right price so as to maximize revenue (Kimes, 1989a, p. 15; 1989b). When the hotel industry initially adopted RM in the late 1980s, the nature of its demand-driven pricing was seen as a violation of the fairness principle, and consumers' price unfairness perceptions presented a critical restriction in applying RM pricing (Kahneman, Knetsch, & Thaler, 1986; Kimes, 1989a). As a result, much of the literature on RM has been devoted to identifying moderating factors that influence consumers' price unfairness perceptions toward RM pricing practices; these include familiarity (Andres-Martinez, Gomez-Borja, & Modejar_Jimenez, 2014; Mauri, 2007; Wirtz & Kimes, 2007), consumer characteristics (Beldona & Kwansa, 2008; Srikanth Beldona & Namasivayam, 2006; Heo & Lee, 2011), existing information (Choi & Mattila, 2005; Taylor & Kimes, 2011), pricing framing (Choi & Mattila, 2009; Noone & Mattila, 2009), and norm perceptions (Choi & Mattila, 2009), etc.

For example, consumers' familiarity has been extensively examined as a factor that moderates and influences the way consumers perceive the fairness of RM's dynamic pricing (Wirtz & Kimes, 2007; Mauri, 2007; Choi & Matilla, 2003; Heo & Lee, 2010).

Previous studies have found that the more familiar consumers are with dynamic pricings, the more likely they are to perceive it as acceptable. As consumers' price fairness perceptions are subjective (Xia, Monroe, & Cox, 2004) and sensitive to contextual factors (Kalapurakal, Peter, & Urbany, 1991), many researchers have contested the generalizability of the "dual entitlement" fairness principle (Kalapurakal, et al., 1991; Urbany, Madden, & Dickson, 1989). The dual entitlement fairness principle proposes an implicit contract between sellers and buyers; increasing prices in response to demand is considered to violate this contract and thus be unfair (Kahneman, Knetsch, and Thaler, 1986). It has been argued that when consumers have a high degree of self-interest and involvement in the transaction, there may be no simple, robust principles that govern the standard of what is fair or unfair pricing (Kalapurakal, et al., 1991; Urbany et al., 1989; Xia, et al., 2004).

Involvement theory explains this phenomenon by stating that consumers have different standards for evaluating the seller's price depending on how involved they are in the situation (Chandrashekaran, 2012; Chandrashekaran & Grewal, 2003). More specifically in terms of hotel room rates, involvement theory implies that consumers who have different degrees of involvement use different processes in evaluating the same situation of hotel room rate increases because they may have different levels of knowledge, information, and desire (Bloch & Richins, 1983). When high-involvement consumers evaluate the offered price, they may immediately recall their knowledge, experiences, and well-developed standards to evaluate the offered price (Biswas & Blair, 1991; Biswas & Sherrell, 1993; Chandrashekaran, 2012). When low-involvement consumers evaluate the offered price, they may consider the price information itself to be

more important than any other criteria because they do not have much knowledge and information about the product or service in the market to evaluate the seller's prices (Biswas & Sherrell, 1993). However, although the level of involvement has been examined in the context of decision-making processes (Park, Lee, & Han, 2007; Petty & Cacioppo, 1979) and behavioral pricing (Chandrashekaran, 2012), it has not yet been applied to price fairness perceptions research in the hotel industry. To address this gap in research, this study examines high/low involvement as a moderator to determine its influence on the research model.

Another limitation of the research on the relationship between consumers' price fairness perceptions and behavioral response in the hotel industry is caused by using a bipolar measurement of price fairness perceptions. Previous research has used the bipolar conceptualization to measure consumers' perceived price fairness. It is intuitively apparent that the bipolarity of positive and negative evaluative processes leads to a positive or negative behavioral response, respectively (i.e., approach and avoidance behavior) (Cacioppo & Bernston, 1994). Indeed, the relationship between perceived price fairness and behavioral intentions has been found to be reciprocally related. For example, perceived price fairness influences repurchase intentions, a spread of positive word-of-mouth, and recommendation to others (Haddad, Hallak, & Assaker, 2015). Perceived price unfairness has a negative effect on revisit intentions (Noone & Mount, 2009) and a positive effect on switching to another service provider (Varki & Colgate, 2001). The bipolar measurement of perceived price fairness not only limits the full measurement of consumers' price fairness/unfairness perceptions but also constrains the examination of

the relationship between price fairness perceptions and behavioral responses (Cacioppo & Bernston, 1994).

The bivariate measurement of perceived price fairness and unfairness, in contrast, enables the investigation of behavioral conflicts (Cacioppo & Bernston, 1994) such as the inconsistent relationship between attitude and behavior regarding blood donation (Cacioppo & Bernston, 1994) or recycling behavior (Smith, Haugtvedt, & Petty, 1994). Such behavioral conflicts can be observed in consumer behavior when consumers perceive the price to be unfair but are still willing to purchase the product. This phenomenon can be explained by acknowledging that "positive and negative evaluative processes have some non-overlapping operating components that are opposing in their effects on behavior and are capable of being differentially activated" (Cacioppo & Bernston, 1994, p.411). Involvement theory implies that high- and low-involvement consumers have different processes in evaluating the same situation (Chandrashekaran & Grewal, 2003). Therefore, using a bivariate measurement of perceived price fairness and unfairness, this study is equipped to fill this gap and examine the moderating role of consumers' involvement on the relationship among price increases, consumers' perceived price fairness/unfairness, and booking intentions.

4.3 Conceptual Background and Hypotheses

4.3.1 Results of a Previous Study on the Bivariate Model of Perceived Price Fairness/Unfairness

The bivariate model of perceived price fairness/unfairness and its impact on consumers' booking intentions were examined in the second study presented in this

dissertation. The results of that study suggest that the magnitude of price increases reciprocally affect perceived price fairness and perceived price unfairness, and reveal that consumers' perceived price fairness has a stronger effect on booking intentions than perceived price unfairness. In addition, this second study found an interaction effect caused by hedonic vs. utilitarian situations. Based on these results, in this present research, the situational effect acted as a control variable to test the moderating role of consumer involvement in the research model.

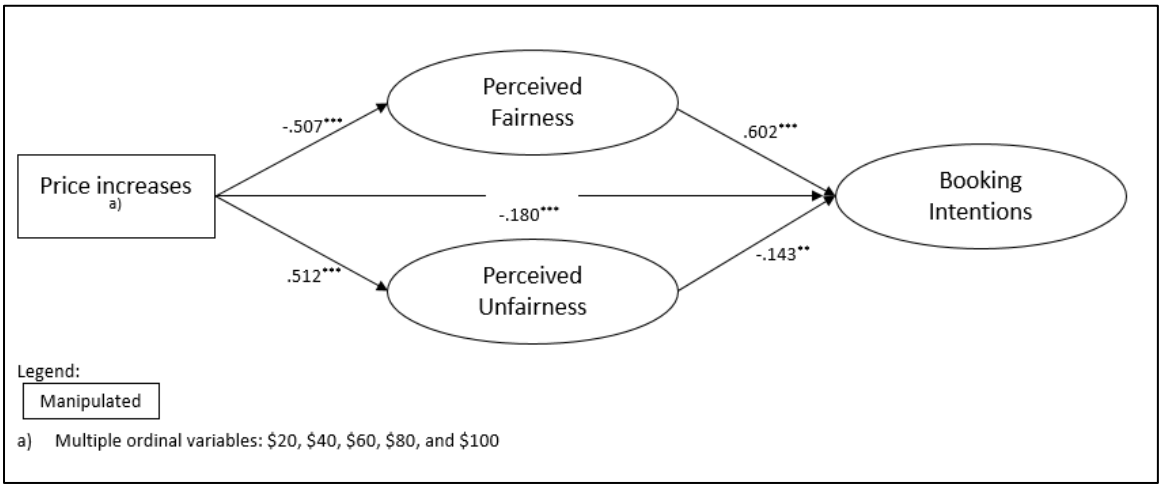


Figure 4.1 Results of the Second Study

4.3.2 The Moderating Role of Consumers' Involvement

Consumer involvement is defined as "the degree of personal relevance, interest and/or subjective feeling of importance (Chandrashekaran & Grewal, 2003, p. 55)" about the product/service or the purchase decision situation (Celsi & Olson, 1988). In other words, consumers' involvement in a situation is a temporary increase of relevance or interest that arises at the time of a purchase decision (Park et al., 2007). Previous

literature suggests that the same object can have different involvement levels across people inducing a different behavioral response (Clarke & Belk, 1978) and also that the consumers' situational involvement influences their information evaluation process (Celsi & Olson, 1988; Bloch & Richins, 1983; Cacioppo & Pretty, 1979, Pretty et al, 1983; Zaichokoswsky, 1985).

The Elaboration Likelihood Model (ELM) provides a theoretical perspective on consumers' information evaluation processes (Pretty et al., 1983). ELM posits that high-involvement individuals are more likely to engage in thoughtful, effortful processing via the central route to evaluate the object whereas low-involvement individuals are more likely to rely on the peripheral cues from the stimulus to process the information (Meyer-Levy & Peracchio, 1996). ELM can be applied to behavioral pricing research (Chandrashekaran, 2003). When consumers are exposed to a hotel's offered price, they assess the offered price based on their own criteria. High-involvement consumers are more familiar with and knowledgeable about the product/service than low-involvement consumers. Thus, high-involvement consumers employ a more advanced cognitive process to evaluate the accuracy of offered price (Richins & Bloch, 1986). In contrast, low-involvement consumers are likely to use simple heuristics cues such as price to evaluate the product or service. Consequently, high- and low- involvement consumers have different internal reference price levels for a product or service (Chandrashekaran & Grewal, 2003).

In the context of shopping behavior with comparative advertising pricing, high-involvement consumers are associated with product/service knowledge and the motivation to use relevant information to evaluate the price. On the other hand, low-

involvement consumers are associated with a low level of product/service knowledge and the lack of motivation to engage in a detailed process of evaluation. In the case of price increases, it is reasonable to expect that high-involvement consumers are likely to evaluate the given situation with more information and knowledge but low-involvement consumers may evaluate the situation simply based on the magnitude of price increases because they do not have much knowledge and information about hotel pricing. This may imply that low-involvement consumers are more sensitive to price increases, and that they are more likely to perceive price increases as less fair and more unfair than high-involvement consumers. Therefore, we hypothesize:

***H_1**: The magnitude of price increases has a stronger impact on perceived fairness for the low-involvement group than the high-involvement group.*

***H_2**: The magnitude of price increases has a stronger impact on perceived unfairness for the low-involvement group than the high-involvement group.*

***H_3**: The magnitude of price increases has a stronger negative impact on booking intentions for the low-involvement group than the high-involvement group.*

Chandrashekaran (2003) found that low-involvement consumers are likely to have a quicker and more positive response. The marketing tactics used to promote sales are more effective for low-involvement consumers because they are unable to make precise and comprehensive price comparisons (Bloch & Richins, 1983). Consequently, low-

involvement consumers are likely to be more positive about supporting the products/services whereas highly involved consumers tend to engage in more elaboration and oppose the objects. Meanwhile, Biswas and Blair (1991) showed that high-involvement consumers tend to be more confident of their price estimations because their evaluation is more elaborate than those who lack knowledge and involvement with the product/service. On the other hand, low-involvement consumers, because their evaluation depends on simple information and rather spontaneous decisions, may be reluctant to act in a difficult decision-making situation if they perceive the certain situation negatively and lack strong confidence in their evaluation. As such, the high-involvement consumers are more likely to be critical toward the object and more likely to have a negative response than the low-involvement consumers while low-involvement consumers are less likely to engage in significant elaboration and tend to have a more positive response (Pretty et al., 1983). Thus, we hypothesize that:

***H_4**: The impact of perceived price fairness on booking intentions is stronger for low-involvement consumers than high-involvement consumers.*

***H_5**: The impact of perceived price unfairness on booking intentions is stronger for high-involvement consumers than low-involvement consumers.*

4.4 Methodology

4.4.1 Measurements

Table 4.1 Scenario description

Scenario 1: Sporting event (Hedonic situation) Imagine that you were planning a trip to watch your favorite professional sports teams play. You were planning to stay in a hotel for the game night. You found a 3-star hotel that satisfied your needs. Typically, you know that the average room rate for this type of hotel is $100. Due to the football game, all hotels were expected to be fully booked on the game night. Scenario 2: Weather related event (Utilitarian situation) Imagine that your neighborhood area was flooded and had a power outage due to storm. You are planning to stay in a hotel for the night as an alternative housing. You found a 3-star hotel that satisfied your needs. Typically, you know the average room rate for this type of hotel is $100. Due to the storm, all hotels were expected to be fully booked for the night of your stay.

A scenario experiment was used to manipulate experimental situations. The questionnaire consisted of four sections. The first section assessed the participant's hotel booking experiences (i.e. frequency of hotel booking experience within the past year, internet booking experience, familiarity with hotel's dynamic pricing, etc.) to facilitate participant recall of their hotel booking experiences.

After reading the randomly assigned scenario, participants were asked to indicate the level of perceived hedonic value (i.e., fun, exciting, delightful, and thrilling) and utilitarian value (i.e., helpful, functional, and practical) of a hotel stay in the given

situation. These questions were used to measure the consumer's hedonic and utilitarian values (Voss, Spangenberg, & Grohmann, 2003) in booking a hotel under the given situation. To capture how important the given situation is to each participant, Zaichkowsky's involvement measurement (1985) was modified to measure the individual level of involvement in the experimental situation. The measurement statements of consumer's involvement are:

1) It is very important to stay in a hotel in this situation.
2) I would want to stay in a hotel in this situation.
3) Staying in a hotel in this situation really matters to me.

Then, each participant was exposed to one of the magnitudes of room rate increases ($20/$40/$60/$80/$100) and was asked to indicate their level of perceived fairness in the given situation, each with four measurement items: reasonable, acceptable, fair, and justifiable (Bolton, Warlop, & Alba, 2003).

After measuring their perceived price fairness, the subjects were asked to recall the given scenario situation and indicate the correct situation to ensure the subject correctly envisioned themselves in the manipulated situation. This validation question was employed to minimize the carry-over effect of the previous questions on fairness perceptions remaining in their memory. After the validation question, the subjects were asked to indicate their level of unfairness perceptions with four measurement items: unreasonable, unacceptable, unfair and unjustifiable. We avoided using bipolar continuum scales and instead used two different measurement constructs: fairness perceptions and unfairness perceptions using a 7-Likert scale (Strongly Disagree – Strongly Agree).

The final section assessed the participant's demographic variables (i.e. gender, age, education, marital status, annual household income, and employment). At the end of the survey, we added a question to verify whether each respondent fully understood the given situation. If a respondent chose the wrong answer, we assumed that the respondent was not qualified to participate in the project, and their answers were eliminated.

4.4.2 Data Analysis

This study uses structural equation modeling (SEM) to analyze the relationship among price increases, fairness and unfairness, and booking intentions. ANOVA and MANOVA have been predominantly used to analyze quasi-experimental research. SEM has three advantages for experimental design research (Gupta, 2014): 1) the measurement model test enables to the use of the latent variable approach to operationalize observed variables, 2) the structural model allows researchers to test direct and indirect causal relationships between research constructs, and 3) the metric invariance test enables group modeling.

The experimental situations (price increases due to hedonic and utilitarian events) manipulated the different levels of hedonic and utilitarian values and price inequality. We used a self-administration survey asking the respondents for their perceptions and reactions to the manipulations. This procedure also enables a better representation of the measurement of error and causality (Bagozzi, 1977; Rusell et al., 1998). Each experimental manipulation can be an indicator of the true independent variable (Bagozzi, 1997, p. 224). The SEM analysis in the experimental research enables a model measurement of error and can diagnose certain relationships or flaws in the experimental

design. Powerful tests of manipulation effects are less likely to be biased by random or correlated measurement errors, and the impact of these experimental manipulations can be specified and effectively tested (Russell et al., 1998).

4.5 Results

4.5.1 Respondents' Profiles

A total of 761 surveys were collected from Internet survey panels. Of the respondents, 729 reported that they have experienced and are familiar with the dynamic pricing practices of hotels. We chose only these respondents for the data analysis. Among those respondents, outliers were retained as they reflect the random variability inherent in a randomized assignment.

Table 4.2 shows the respondents' demographics and profiles. Among the 729 valid respondents, 54.81% are male and 45.19% are female. The average age of respondents is 35.13 years old with the ages ranging from 18 to 73. The average annual household income levels indicate that 76.41% of respondents have an annual household income of $60,000 or under and 23.59% over $60,000. The sample includes 43.82 % of respondents who have a high school or associate's degree and 56.18% with a bachelor's degree or higher. 3.98% of respondents have not stayed at a hotel in the past 12 months, 75.17% of respondents have stayed at a hotel 1 to 4 times in the past 12 months, and 20.85% of respondents have stayed at a hotel more than five times in the past 12 months. 1.51% of respondents usually stay in one-star hotels, 6.88% of respondents tend to stay in two-star hotels, 56.81% in three-star hotels, and 34.60 % of them primarily stay in four or five-star hotels. Most respondents (99.45%) have used the internet to book a hotel.

Table 4.2 Respondents' Demographics (N=729)

Characteristics	Freq.	Percent	Characteristics	Freq.	Percent
Gender			**Marital Status**		
Male	399	54.81%	Married	289	39.64%
Female	329	45.19%	Single	398	54.60%
			Other	42	5.76%
Age			**Total annual household income**		
18-20	8	1.1%	Less than $20,000	165	22.63%
21-30	305	42.84%	$20,001 - $40,000	222	30.45%
31-40	239	32.78%	$40,001 – $60,000	170	23.32%
41-50	88	12.07%	$60,001 – $80,000	86	11.80%
51-60	62	8.50%	More than $80,001	86	11.80%
61-	27	3.70%			
Education			**Employment**		
High School or equivalent	176	24.14%	Part-time employed	171	23.49%
2-year college degree	166	22.77%	Full-time employed	431	59.20%
4-year college degree	294	40.33%	Unemployed	61	8.38%
Graduate / Professional degree	93	12.86%	Retired	22	3.02%
			Homemaker	31	4.26%
			Others	12	1.62%

Note: Insignificant level of χ^2 indicates the homogeneity of sample distribution in each group.

4.5.2 High – and Low-Involvement Group Assignment and Assessment

For the group comparison to test the moderating role of high and low involvement in this study model, the respondents were divided into high and low groups based on their response to three items of involvement measurement (Zaichkowsky, 1985 ; $\alpha_{\text{involvement}} = 0.859$). The mean values of involvement were significantly different between groups in a hedonic situation and those in a utilitarian situation ($\mu_{\text{hedonic}} = 5.192$, $\mu_{\text{utilitarian}} = 5.576$, $\Delta\mu = 0.383$, $t = 4.253$($df = 727$), $p<0.001$). Thus we separately divided two groups for each

situation. The median value was used to divided high- and low-involvement groups ($M_{hedonic}$ = 5.333, $M_{utilitarian}$ = 5.666). The divided cases totaled 335 (high-involvement group) and 337 (low-involvement group).

To ensure that the distribution of two groups in our experimental setting was random and homogeneous, a chi-squares test was conducted, which showed an insignificant difference between the hedonic and utilitarian situations ($\chi^2(1)$ = 0.315, p>0.05) and in different levels of price increases ($\chi^2(4)$ = 3.617, p>0.05).

4.5.3 Measurement Model

4.5.3.1 Overall Measurement Model

Based on Anderson and Gerbing's (1988) two-step approach, a measurement model using Stata ® 13 was estimated before the structural model. A confirmatory factor analysis (CFA) was first conducted to assess the measurement model and to test reliability, construct validity, and convergent validity. All standardized factor loadings of each construct were high, ranging between 0.885 and 0.975 and thus ensuring the measurement had convergent validity. All Cronbach's alpha values, as well as composite reliability values, were above 0.9, ensuring internal consistency.

Table 4.3 Standardized Confirmatory Factor Analysis Properties and Reliability

Factors	Factor Loading	Cronbach α	Composite Reliability
Perceived Price Fairness		.903	.964
Reasonable	.962		
Acceptable	.966		
Fair	.924		
Justifiable	.885		
Perceived Price Unfairness		.905	.967
Unreasonable	.964		
Unacceptable	.975		
Unfair	.919		
Unjustifiable	.891		
Booking Intentions		.958	.958
Willing to book	.903		
Would like to book	.954		
Will book a room	.964		

Table 4.4 Measure Correlations, Squared Correlations, and Average Variance Extracted (AVE)

	PPF	PPUF	BI
Perceived Price Fairness	1.00		
Perceived Price Unfairness (squared correlations)	-.842** (.598)	1.00	
Booking Intentions (squared correlations)	.764** (.583)	-.706 (.498)	1.00
AVE	.881	.857	.885
Mean	3.795	4.190	4.074
SD	1.756	1.844	1.794

*Note: ** p< 0.01 * p<0.01*
Model Measurement Fit: χ^2 =219.96, *df* =38 (*p*< 0.01), Root Mean Square Error of Approximation [RMSEA] = .080, Comparative Fit Index [CFI] = .985, Tucker-Lewis Index [TLI] = .978
AVE = Sum of squared standardized loading / (Sum of squared standardized loading + sum of indicator measurement error)
Composite reliability = Squared sum of loading / (squared sum of loading + sum of indicator)

As shown in Table 4.4, the average variance extracted (AVE) numbers from two constructs exceed the cut-off criterion of 0.5, and are greater than the squared correlations

of perceived price unfairness and perceived price fairness. This proves that the measurement has convergent validity and discriminant validity. The CFA on three latent variables (perceived fairness, perceived unfairness, and booking intentions) with eleven observed variables show the goodness-of-fit indices (χ^2 =219.96, *df*=38, $p< 0.01$), root mean square error of approximation [RMSEA] = .080, comparative fit index [CFI] = .985, and Tucker-Lewis Index [TLI] = .978.

4.5.3.2 Test for Invariance Comparing High vs. Low Involvement

The hypothesized moderating role of high- and low-involvement in determining perceived price fairness, perceived price unfairness, and booking intentions was assessed using a series of modeling tests for metric invariance.

A measurement invariance test was conducted to verify invariance across high-low involved respondents (Acock, 2013). A non-constraint model (none group) was assessed and compared to the full-metric invariance model for high-low involved respondents. The results of the test for metric invariance comparing high-low involvement showed significant differences, so the equal loading model was rejected. Post estimation was conducted to detect the problematic loadings and found that the construct of booking intentions has a different loading for high and low involvements. Instead of using the construct of booking intentions, we used the single item of booking intentions "I would like to a book a room at the given room rate" as a dependent variable to conduct the path analysis to test the hypothesis.

The measurement invariance test results for the modified measurement model are summarized in Table 4.5. The results show that the chi-square difference of the likelihood-ratio test between the constraint invariance model and the full-metric invariance model is non-significant, ensuring that our modified model is valid to test the group comparison for both high- and low-involvement groups.

Table 4.5 Test for Metric Invariance Comparing for High- and Low- Involvement Groups

Model	χ^2(df)	RMSEA	CFI	TLI	$\Delta\chi^2(df)$
Constraint model	108.943(32)	0.081	0.991	0.985	8.809(6) P >0.05 (NS)
Full metric model	116.134(38)	0.075	0.991	0.987	

4.5.4 Structural Equation Model for Group Comparison

A structural equation model using Stata® 13 was applied to estimate the relationships among price increases, perceived fairness, perceived unfairness, and booking intentions. The SEM results indicate a goodness-of-fit statistics (χ^2 =170.56, *df*=35, *p*< 0.0001, RMSEA= 0.073, CFI =0.986, TLI = 0.979) for bivariate measurements of perceived unfairness and perceived fairness. The overall model (without group comparison) has been addressed in the previous (Chapter 3) work. Although we used the modified model (inclusion of a control variable of the situation and a latent variable of booking intentions with a single item instead of the measurement construct of booking intentions), the results are not different from the second study. Thus, we proceeded to analyze the group comparison model for the low-involvement group and high-involvement group.

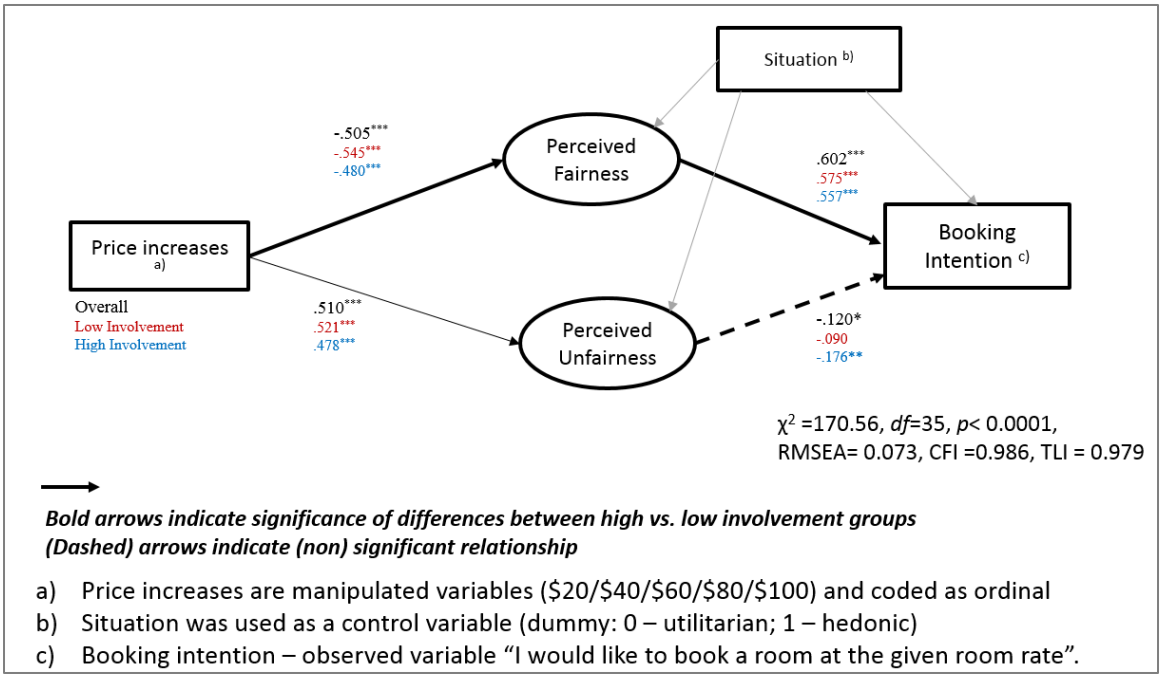
Table 4.6 Results of SEM and Group Comparison

	Overall	Group comparison model			
		Baseline model		Constraint model	
χ^2 (*df*)	170.56 (35)	223.141 (85)		*204.151(77)*	
	p < 0.001	*p <0.001*		*p <0.001*	
RMSEA	0.073	0.070		0.070	
CFI	0.986	0.985		0.986	
TFI	0.979	0.981		0.981	
		Low-involvement N=335	High-involvement N=337	Group invariance: χ^2 (*df*)	
PI → Fair (H_1)	-.505***	-.545***	-.480***	4.253(1), *p<0.05*	Support
PI → Unfair (H_2)	.510***	.521***	.478***	0.011(1), NS	Not
PI → BI (H_3)	-.157***	-.162***	-.185***	2.478(1), NS	Not
Situation [a] →Fair	.169***	.145***	.222***		
Situation [a]→Unfair	-.207***	-.193***	-.241***		
Situation [a]→ BI	-.062**	-.080*	-.031		
Fair → BI(H_4)	.602***	.576***	.557***	7.550(1), *p=0.052*	Support
Unfair → BI (H_5)	-.120*	-.090	-.176**	5.258(1), *p<0.05*	Support
R^2 (Unfairness)	.305	.316	.283		
R^2 (Fairness)	.285	.323	.276		
R^2 (BI)	.628	.564	.665		

Note. *** *p<0.001* ** *p<0.01,* * *p<0.05, and NS: insignificant*

Joint test for group invariance of each parameter: $\Delta \chi^2 = 18.276(7)$, $p<0.05$

[a] Situation as a control variable (dummy: 0 – utilitarian; 1 – hedonic)



*Note: ***p<0.001, **p<0.01, *p<0.05*

Figure 4.2 The Results of SEM

A baseline model and a constraint model of the group comparison model were generated based on the full-metric invariance model. The results indicate that the baseline model for both groups parsimoniously fits to the data (χ^2 =223.141, *df*=85, *p*< 0.001, RMSEA= 0.070, CFI =0.985, TLI = 0.981). This baseline model was compared with a constraint model whose structural coefficients are constrained to be equal. The results of modeling comparisons using a chi-square difference test are presented in Table 4.6; the joint test results for group invariance of each parameter show a significant level of difference ($\Delta \chi^2$ = 18.276(7), p<0.05), revealing that there is an overall moderating effect of high and low involvement in the research model. The results show that the paths from price increases to perceived price fairness ($\Delta \chi^2$ = 4.253(1), p<0.05), perceived price unfairness to booking intentions ($\Delta \chi^2$ = 5.258(1), p<0.05), and perceived price fairness to

booking intentions ($\Delta \chi^2 = 7.550(1)$, $p<0.01$) significantly differed across high and low involvement groups (Figure 4.2). This implies that high and low involvement moderate a) the effect of price increases on perceived price fairness, b) the effect of perceived price fairness on booking intentions, and c) the effect of perceived price unfairness on booking intentions. Thus, H_1, H_4, and H_5 were supported. However, the effect of price increases on perceived unfairness ($\Delta \chi^2 = 0.011(1)$, $p>0.05$) and the effect of price increases on booking intentions ($\Delta \chi^2 = 2.478(1)$, $p>0.05$) are not significantly different between the high-involvement group and the low-involvement group, indicating that there is no moderating effect of involvement in the relationship between price increases and perceived price unfairness, and between price increases and booking intentions.

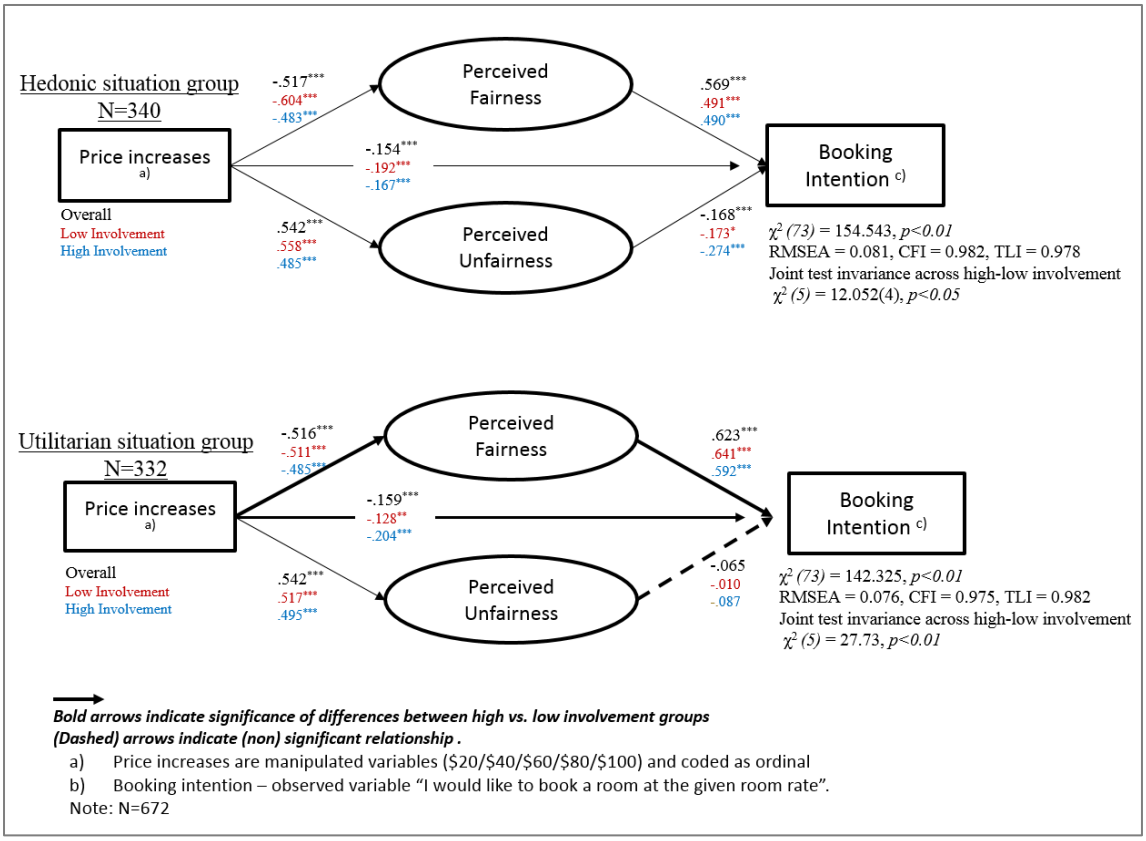
4.5.5 Additional Findings- Hedonic vs. Utilitarian Situation

Additional group comparisons were conducted to compare the hedonic vs. utilitarian situations for each high and low involvement group (Figure 4.3). This analysis is exploratory in nature and as such these are findings for which no hypotheses have been constructed. The main research model was controlled by a situation dummy variable. As the second study demonstrated, the hedonic and utilitarian situations have a significant interaction effect in the research model. Thus, additional analysis offers a broad view of the moderating role of involvement in the relationship among price increases, perceived price fairness or unfairness, and booking intentions in each hedonic and utilitarian situation.

The results of the additional analysis affirm the main findings:

1. Consumers' perceived price fairness, rather than perceived price unfairness, is the stronger driver for booking intentions for both high-and low-involvement consumers.
2. Low-involvement consumers have a more sensitive perceptions of price fairness regarding price increases than high-involvement consumers.
3. The effect of perceived price fairness on booking intentions is stronger for low-involvement consumers than high-involvement consumers.
4. However, the effect of perceived price unfairness on booking intentions is stronger for high-involvement consumers than low-involvement consumers. This result only applies to the hedonic situation. In the utilitarian situation, perceived price unfairness does not have any significant impact on booking intentions.

These unique findings from the additional analysis reveal that in the utilitarian situation, consumers' perceived price unfairness does not have a significant impact on booking intentions regardless of level of involvement. Although there is no significant moderating effect of involvement on the path relationship in the hedonic situation, the result of the joint test invariance across high- and low-involvement shows an overall moderating effect in the model ($\Delta \chi^2 = 18.052(4)$, $p<0.05$).



*Note: ***p<0.001, **p<0.01, *p<0.05*

Figure 4.3 The Results of Additional SEM

4.6 Conclusion

4.6.1 Discussion

This study demonstrates the moderating role of consumers' involvement in the relationship among price increases, perceived price fairness and unfairness, and booking intentions. Three major findings emerge from the results of SEM analysis. First, high-involvement consumers are less sensitive to price increases than low-involvement consumers. More specifically, price increases have a stronger effect on perceived price

fairness (i.e., consumers perceive price increases as less fair) in low-involvement consumers than in high-involvement consumers. As previous studies on reference price suggest (Chandrashekaran & Grewal, 2003; Richins & Bloch, 1986), low-involvement consumers are susceptible to simple cues such as price information when making a purchasing decision whereas high-involvement consumers do not only have price information but also their subjective standards, norms, and market knowledge to evaluate the offered deal. Thus, although high-involvement consumers may consider the hotel's dynamic pricing to be a business norm, this may not restrict RM operation.

Second, the effect of perceived price fairness on booking intentions is stronger for low-involvement consumers than high-involvement consumers. This result is in agreement with Chandrashekaran and Grewal (2003)'s findings that low-involvement consumers more easily and quickly accept a positively-evaluated event than high-involvement consumers. Thus, simple marketing tactics easily tempt low-involvement consumers to engage in in spontaneous shopping (Biswas & Blair, 1991). Third, the negative effect of perceived price unfairness on booking intentions is not significant for low-involvement consumers but significant for high-involvement consumers. This may be because low-involvement consumers have low confidence in their judgment of price unfairness(Biswas & Blair, 1991), which makes them reluctant to rely on their perceived price unfairness. However, high-involvement consumers may have robust evaluation standards regarding about price increases, so their judgment of price increases may have a significant effect on their booking intentions.

Fourth, although high-involvement consumers are responsive to perceived price unfairness that decreases booking intentions, the relative magnitude of perceived price

fairness' effect on booking intentions is significantly stronger than that of perceived price unfairness (z= 25.71, $p<0.001$ for low-involvement consumers; z = 4.30, $p<0.001$ for high-involvement consumers). Thus, this study confirmed that consumers' perceived price fairness is the stronger driver of booking intentions regardless of the degree of the consumers' involvement in the booking situations.

Additional analysis confirms the interpretation that perceived price unfairness has non-significant impact on booking intentions for both high- and low- involvement consumers in the utilitarian situation, as was suggested by the results of the previous work (Chapter 3). That is, in the utilitarian situation, regardless of how important the situation is, consumers who perceived price increases as unfair would, nevertheless, book a room during excess demand events such as severe weather. Urbany, Madden et al. (1989) also identified this inconsistent behavioral response to perceived unfairness, demonstrating that consumers are willing to begrudgingly pay unfair prices despite complaining about the unfairness of pricing. These results should not be interpreted as proving that perceived unfairness is not an important factor for consumers' behavioral responses in a utilitarian situation because this study did not include negative behavioral responses such as negative word or mouth and complaints. When consumers feel at odds with a choice mandated by circumstances (the utilitarian situation), post responses might include purchase withdrawal, buyer's remorse, complaining behavior, revenge, and impaired trust (Xia, Monroe, & Cox, 2004) which were not covered in this research.

4.6.2 Theoretical and Practical Implications

The findings of this research have novel theoretical implications for the moderating role of involvement in the relationship among price increases, perceived price fairness / perceived price unfairness, and booking intentions. We first witness that the moderating effect of involvement significantly differs between utilitarian situations and hedonic situations. Consumer involvement refers to the cognitive process used to evaluate the given situation (Richins & Bloch, 1986). The fact that the moderating effect of involvement is stronger in a utilitarian situation, in which consumers engage in decision-making based on a logical information process (Hirschman & Holbrook, 1982), than in hedonic situations, in which decisions are based on an affective process (Hirschman & Holbrook, 1982), is noteworthy.

Secondly, the bivariate structure of perceived price fairness and perceived price unfairness contributed to finding distinctive relationships between perceived price fairness and booking intentions, as well as between perceived price unfairness and booking intentions. The bivariate structure enabled comparisons to show that perceived price fairness and perceived price unfairness differently influence consumers' behavioral responses. However, most researchers have used a binary (Kahneman et al., 1986; Kahneman, Knetsch, & Thaler, 1986; Urbany et al., 1989) or bipolar scale (Beldona & Kwansa, 2008; Campbell, 1999a, 1999b, 2007; Choi & Mattila, 2003; Heo & Lee, 2011; Kimes & Wirtz, 2003) to measure price fairness perceptions. Within the reciprocal frame of fair or unfair given by a binary or bipolar measurement structure, it would have been impossible to identify distinctive relationships between perceived fairness and booking

intentions and between perceived price unfairness and booking intentions (Cacioppo, et al., 1997).

Understanding how consumers' involvement affects a booking decision is imperative for hotel management. The results of this study present three important considerations for hotel operators and RM managers. First, the effect of perceived price fairness on booking intentions was found to be more powerful than that of the effect of perceived price unfairness. Thus, hotel management might consider promoting consumers' perceived price fairness rather than reducing perceived unfairness to attract more consumers to book their hotels.

Second, the results revealed that high-involvement consumers are less sensitive to price increases. This implies that the more the consumer is involved in hotel's dynamic pricing and booking situation, the more likely s/he is to have other criteria for making a booking decision. Thus, the hotel management should build a close relationship with the customers to provide various information to be stored in the consumers' memory and activated when the consumer makes booking decisions.

Third, this research showed that perceived price unfairness has no significant effect on booking intentions in the utilitarian situation. However, it should not be interpreted to mean that hotel operators can ignore perceived price unfairness in utilitarian situations. This study did not measure negative behavioral responses such as negative word of mouth and consumer complaints. In utilitarian situations, particularly in case of excess demand, hotel operators and managers should rather consider that they may have customers who begrudgingly book a hotel room because they need a place to stay. Although this research did not explore the long-term impact of customers' feeling

forced to accept an unfair option, it is important to consider both short-term and long-term impacts of consumers' responses to dynamic pricing.

This study manipulated price increase situations that occur due to excess demand. The excess demand situations were designed to be a sporting event and a weather-related event. In real life, although weather-related events are beyond human control, most external events can be planned and managed by cooperating with local government (such as the Convention and Visitors bureau) or event organizers. Not only hotel managers, but also professionals and organizations in event management, can collaborate with the hotel industry to create and host large events to promote travel and boost hotel demand. As high-involvement consumers are less sensitive to price increases, hosting large events that attract a large population of highly involved consumers will benefit hotels. Hotel managers should cooperate with event professionals to make events more relevant to attendees, so as to promote consumers' perceived price fairness and to reduce consumers' perceived price unfairness.

4.6.3 Limitations and Suggestions for Future Research

Several limitations of this study should be considered when interpreting the results for future studies. First, this study manipulated experimental situations, a 3-star hotel visit for a hedonic event (a sporting event) and a utilitarian event (a weather related event), which were controlled in the research model. Therefore, these results may be limited in their application to other hotel settings, and only applicable to a general situation during a time of high hotel room rates. This was an intentional choice in this

study; we compromised on examining detailed relationships under more diverse event situations in order to pursue more generalizable results.

Second, there are a variety of events that cause excess demand in the hotel market such as sport 'participation' events (as opposed to 'watching' events), political events, concerts, academic conferences, business conventions, and so on. The various types of events may have different characteristics and motivations for consumers.

Third, a unidimensional construct of booking intentions was used to test the model due to the equal loading of measurement issue. Future studies may benefit from applying the latent variable of booking intentions with multi-dimensions to gain a more robust model.

Fourth, this research tested only booking intentions as behavioral responses. Negative behavioral intentions such as switching intentions, complaints and negative word-of-mouth would be able to show the extensive relationships with the bivariate structure of perceived price fairness and perceived price unfairness.

Lastly, this research uses the same data as that used in the previous (second) study. Although we include the new variable of involvement, which had not been used in the previous study, fresh data might have been beneficial to reconfirm and extend the previous study. Future studies may extend the findings of this research by integrating personal variables (demographic and psychographics) to reveal further relationships among the study constructs.

CHAPTER 5. GENERAL CONCLUSIONS

In this non-traditional dissertation format, this last chapter summarizes the results of all of the research, integrates the findings from three studies, and offers conclusions regarding the findings.

The purpose of this dissertation was to understand how consumers perceive and respond to hotels' room rate increases as a result of external events that drive excess demand. First, we examined the contextual effect of external events when consumers evaluate hotel room rates. Second, we investigated our suspicion that the conventional measurement of perceived price fairness—using bipolar continuum scales of perceived price fairness (very unfair – very fair)—does not sufficiently measure consumers' perceived fairness and unfairness. Third, we questioned how different levels of individuals' involvement could influence their evaluation of increased room rates and their booking intention.

The three studies in chapters 2, 3 and 4 have empirically examined the effects of dynamic pricing (price increases) on consumers' perceived price fairness and unfairness, and booking intention in hedonic and utilitarian situations. The research created the scenarios to manipulate the experimental situations for different levels of price increases in hedonic or utilitarian events. The experimental scenarios were employed for all three

studies. Each study, however, identified unique problems and attempted to find methodological solutions and factors to examine the effects of dynamic pricing on consumers' responses.

This chapter summarizes and integrates the three studies and their major findings. The theoretical and practical implications of the research, as well as its limitations, are addressed.

5.1 Summary of Major Findings

Study 1 focused on examining the measurement of perceived fairness and unfairness. Many researchers have considered the mid-point responses in bipolar scales meaningless or variable depending on different respondents (Sherif & Hovland, 1961); as a result, mid-point responses have often been removed in market research (Dolnicar, 2013). Study 1 used a two-step process to measure consumers' perceived fairness and unfairness: 1) a binary scale to identify the direction (fair or unfair), and 2) an ordinal scale to capture the magnitude of the perceived fairness and unfairness. The result of Study 1 showed that as the room rate increased, consumers perceived it to be more unfair, but not less fair. The results verified the assertion that price increases are associated with perceived unfairness rather than perceived fairness. Therefore, the continued use of perceived fairness/unfairness measurement with bipolar techniques (very fair – very unfair) could be problematic.

The two-step process forced respondents to select their direction—fair or unfair—and ignore the mid-point of bipolar scales of perceived price fairness/unfairness. This type of process could be beneficial for researchers and marketers to obtain unambiguous

responses from consumers (Dolnicar, 2013) while avoiding the neutral response. However, the meaning of mid-point (neutral) of bipolar scales is debatable. Although many researchers consider the mid-point to be meaningless (Dolnicar, 2013), others consider it to have various meanings (Sherif & Hovland, 1961; Cacioppo & Bernston, 1994).

Study 2 adapted the bivariate structure of positive and negative evaluation framework (Cacioppo & Bernston, 1994; Wilson, Lindsey, & Schooler, 2000) to test the distinction of fairness and unfairness constructs. The results confirmed fairness and unfairness as separate constructs. With the distinction of fairness and unfairness, our research model tested the relationship between price increases, fairness, unfairness, and booking intention. Study 2 found that price increases reciprocally affected both fairness (-) and unfairness (+) perceptions, rejecting the hypothesis that the effect of price increases is stronger on unfairness than on fairness. This hypothesis was supported in Study 1 using the two-step (binary-ordinal) measurement of fairness and unfairness. The result of Study 2 found that perceived fairness rather than perceived unfairness has a stronger effect on booking intentions. This result contradicts the notion of negative dominance, which is common in price fairness perception research and suggests that "losses loom larger."

The distinction of fairness and unfairness enables scholars to capture the full range of consumers' perception about price increases. It can be applied to measure positive and negative evaluation (Cacioppo & Bernston, 1994), attitudinal response (Wilson et al., 2000), emotional response (Larsen & McGraw, 2014), and behavioral response (Caccioppo, Gardner, & Bernston, 1997). Using the bivariate structure of

fairness and unfairness, we discovered that consumers had ambivalent perceptions that included both fairness and unfairness. The ambivalent perceptions were ignored when we used the two-step measurements of binary and ordinal (in Study 1) and could be viewed as meaningless when using bipolar scales.

The result of Study 2 showed that consumers' fairness and unfairness perceptions worked differently on their booking intention depending on whether the situation was hedonic or utilitarian. In hedonic situations, consumers' unfairness perceptions did negatively affect their booking intentions. Contrastingly, in utilitarian situations consumers' unfairness perceptions did not significant impact their booking intentions. However, fairness was a driver of booking intentions for both hedonic and utilitarian situations.

Additionally, before this research, we knew little regarding how consumers' involvement with a service provider affects their perceptions about price fairness and any subsequent behaviors because of their level of involvement. Study 3 tested consumers' different level of involvement and how it affected their fairness and unfairness about price increases and its effect on booking intentions. High-involvement consumers were less sensitive about price increases when they evaluated price fairness. For high-involvement consumers, hotel room rate could be one of many criteria on their minds during the booking process. High-involvement consumers would tend to invest more time and effort to find the best available rooms. However, low-involvement consumers would put in less effort to book a hotel room. Thus, for these consumers price information could be a key criterion to book a hotel room, and they might be easily tempted by price information.

Three studies empirically examined the relationship among price increases, fairness/unfairness, and booking intentions. Study 1 and 2 employed different measurement techniques to find the superior measurement to capture the full range of price perceptions. The bivariate measurement model in Study 2 was sufficient to represent consumers' perceptions of fairness, unfairness and mixed perceptions of fairness and unfairness. The bivariate measurement model allowed Study 2 and Study 3 to investigate the differences in the hedonic and utilitarian situations and in high and low involvement in the research model.

5.2 Summary of the Three Studies

The results of the first study indicate that price increases and hedonic vs. utilitarian situations have significant effects on perceived price unfairness but not on perceived price fairness. This finding empirically verifies the separable activation of price fairness and perceived price unfairness, calling into question whether a bipolar continuum scale of price fairness perceptions (extremely (very) unfair – extremely (very) fair) is sufficient to measure perceived price fairness and perceived price unfairness.

The second study conceptually discusses both reciprocal and non-reciprocal relationships between perceived price fairness and perceived price unfairness and empirically tests the bivariate measurement of perceived price fairness and unfairness. The CFA of the bivariate measurement model results confirms the functional independence of perceived price fairness and unfairness. The test for metric invariances ensures that the bivariate model is valid for both hedonic and utilitarian situations. By using the bivariate measurement model, the research found:

1) Price increases reciprocally affect both perceived fairness (-) and unfairness (+) at a similar degree of effect, rejecting the research hypothesis that the effect of price increases is stronger on perceived unfairness than on perceived fairness.
2) Perceived price fairness, rather than perceived price unfairness, has stronger effect on booking intention, rejecting the hypothesis and the common notion that 'losses loom larger' due to negative bias.
3) The test for metric invariance for group comparison found that the hedonic and utilitarian situations moderate the relationship between perceived price fairness and booking intentions, as well as between perceived price unfairness and booking intentions. In the hedonic situation, perceived price unfairness has a significant effect on booking intentions, but has a non-significant effect in the utilitarian situation. The relationship between perceived price fairness and booking intention is stronger in the utilitarian situation than in the hedonic situation. However, for both situations, perceived price fairness, rather than perceived price unfairness has a stronger impact on booking intentions.

The third study examines the moderating role of consumers' involvement in the relationship among the magnitude of price increases, perceived price fairness and perceived price unfairness, and hotel booking intention. The major findings are:

1) Low-involvement consumers have more sensitive perceptions of price fairness in response to price increases than high-involvement consumers.
2) The effect of perceived price fairness on booking intention is stronger for low-involvement consumers than high-involvement consumers.

3) The effect of perceived price unfairness on booking intentions is stronger for high-involvement consumers than low-involvement consumers.
4) In spite of the significant moderating role found between high- and low-involvement consumers, consumers' perceived price fairness, rather than perceived price unfairness, is the stronger driver for booking intentions for both high- and low-involvement consumers.
5) The moderating effect of involvement is significant in the utilitarian situation but not as significant in the hedonic situation.

5.3 Key Findings

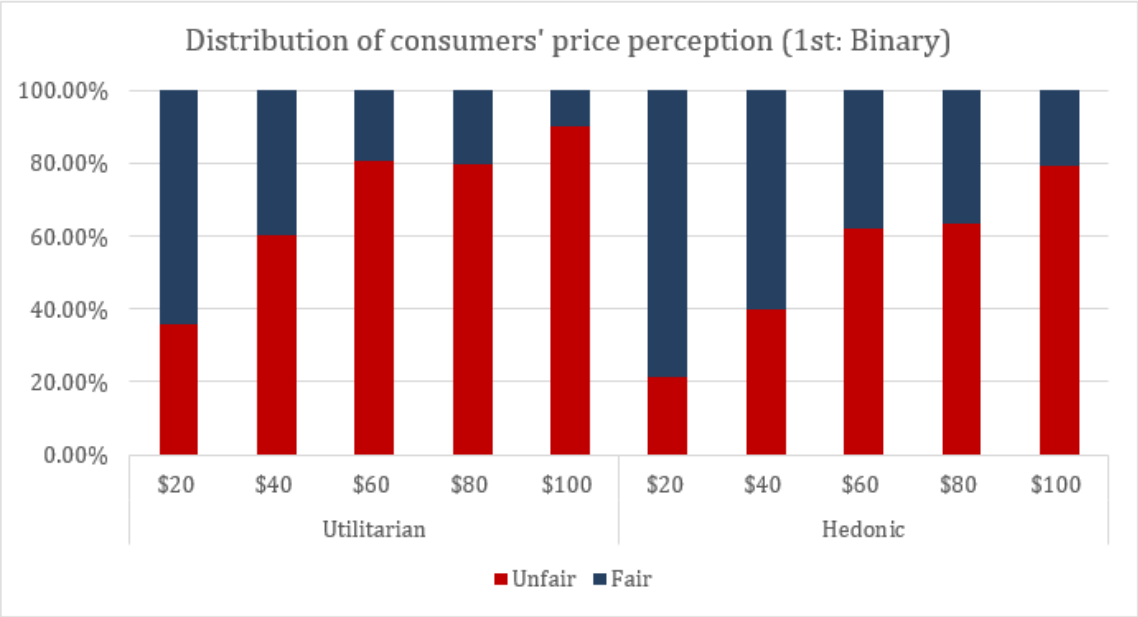
5.3.1 Bivariate structure of perceived price fairness and unfairness

The central question of this dissertation is how consumers evaluate price increases as fair, unfair, or in another way. Many researchers have conjectured that perceived price fairness and perceived price unfairness are conceptually different, but none have attempted to measure fairness and unfairness separately. The first study used the two-step measurement recommended by Dolnicar (2013). The results of the first study show empirically separable activation of perceived price fairness and unfairness, casting a doubt on the assumption that the bipolar continuum scales of perceived price fairness and unfairness are adequate for measuring consumers' price fairness perceptions. However, the two-step measurement that was used in the first study to assist in finding the separability of fairness and unfairness is not sufficient. Two-step measurement was designed to avoid meaningless neutrality. It forced subjects to choose their position fair or unfair, then measure the magnitude of perceived fairness and perceived unfairness.

Thus, this measurement could neither identify ambivalent perceptions (fair and unfair) nor indifference (less fair and less unfair) and cannot capture the combination of consumers' perceived fairness and unfairness.

Figure 5.1 demonstrates the different activation of perceived fairness and unfairness when it is measured by a binary scale (study 1) and by bivariate scale (study 2). When consumers were asked to evaluate each experimental manipulation (price increases in the hedonic vs. utilitarian situation), binary scales tended to capture more unfair options. It is clear to identify that the co-activated mode in the bivariate measurement is merged into unfair in a binary measurement. The results of the first study demonstrate that price increases and the hedonic or utilitarian nature of the situation have significant effects on the level of perceived unfairness, but not on the level of perceived fairness. That is, as price increases, consumers perceive it to be *more unfair*, but not necessarily *less fair*.

The first study shows that price increases have a significant impact on perceived unfairness but not on perceived fairness. However, the second study shows non-significant difference in the effect of price increases on perceived fairness and perceived unfairness. The comparison of these results from the first study and the second study implies that the bivariate structure of perceived fairness and unfairness can reduce an apriori assumed negative dominance.



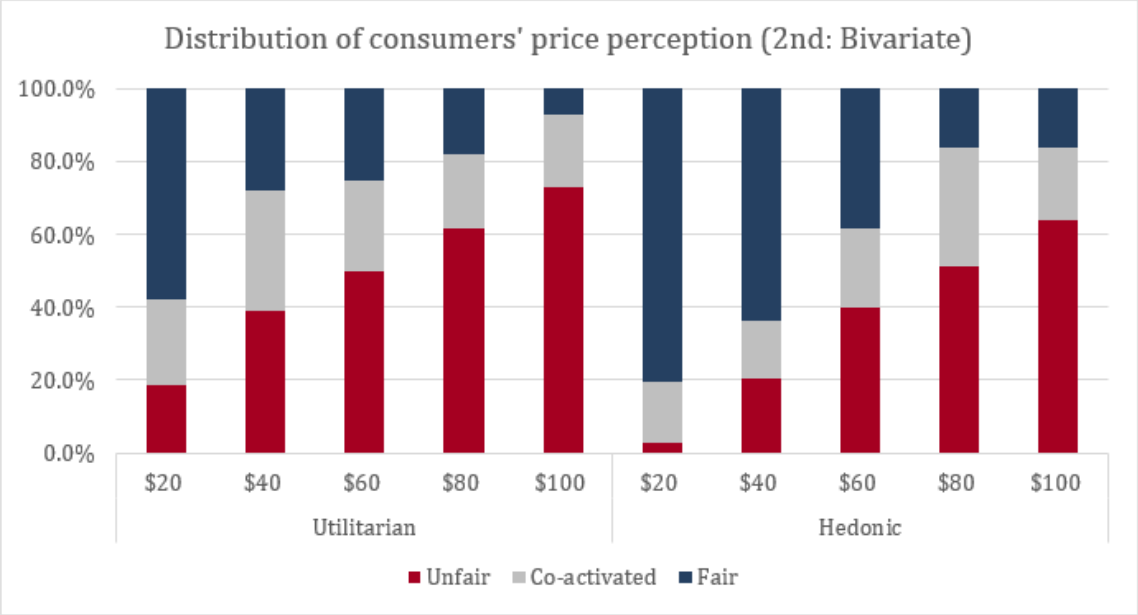


Figure 5.1 Comparison of Consumers' Price Fairness Perceptions by Measurement method (Binary vs. Bivariate)

The SEM results in study 2 and 3 demonstrate that regardless of hedonic vs. utilitarian situations or degree of involvement, perceived price fairness has a stronger effect on booking intentions. These results also dispute the assumptions of negative

potency (i.e., “negative entities are stronger than the equivalent positive entities”: Rozin & Royzman, 2001) and negativity bias (“a positive affect does not have an effect on measured behavior oppositely equivalent to the effect of a negative affect”: Jordan, 1965, p. 315). However, Rozin and Royzman also point out that “although negativity bias is often striking, it is far from universal” (Rozin & Royzman, 2001, p. 297). The stronger effect of perceived price fairness on booking intentions is supported by “the positivity offset” described by Cacioppo et al. as the idea that “the motivation to approach is stronger than the motivation to avoid” in a condition of repeated exposure to familiar stimuli (not extreme ones) (1997). These results could not have been revealed if consumers’ price fairness perceptions had been measured by the predominant method of bipolar continuum measurement.

5.3.2 Hedonic vs. Utilitarian Situations

The hotel business is susceptible to external events such as sporting events, mega events, cultural events, and weather-related events, etc. which can frame the consumers’ motivation for booking hotel rooms. Consumers’ price perceptions are subjective and sensitive to situational contexts. Despite the important role that external events play in hotel pricing and influencing consumers’ price perceptions, situational contexts have not been highlighted in the research on perceived price fairness. These studies provide an important theoretical contribution to the literature by incorporating situational contexts in price fairness perception research within the hospitality and tourism discipline. The findings of the study showed that the effect of price increases on perceived fairness and perceived unfairness does not differ by situation; however, the effects of perceived price

fairness and unfairness on booking intention were found to be different between the hedonic and utilitarian situation. The critical finding from the research is how, given consumers in an utilitarian situation, the effect of perceived unfairness on booking intention is insignificant.

5.3.3 Involvement

Extensive research on RM has been devoted to identifying moderating factors that influence consumers' unfairness perceptions. Familiarity and knowledge (information) were frequently tested to prove their moderating effect on consumers' perceived price fairness about hotels' RM practices. However, consumers' involvement has not yet been studied in price perceptions research in the field of hospitality and tourism management.

The current research has contributed to the applicable literature by extending the theory of involvement to consumers' price fairness perceptions research streams. The results revealed that high-involvement consumers are less sensitive to room rate increases than low-involvement consumers. It is important to note that low-involvement consumers are more sensitive to price increases but their price evaluation is less sensitive to their booking intentions. Contrastingly, high-involvement consumers are less sensitive to price increases but their price evaluation is more sensitive to their booking intentions. The results showed that low-involvement consumers are easily affected by simple information on room rates, but their behavioral response is not as predictable as high-involvement consumers' behavioral response.

5.4 Implications

This dissertation has the following theoretical implications. First, the present study challenges classic work on the fairness principle of "dual entitlement". Most research on perceived price fairness have referred to "dual entitlement" as a basic theoretical foundation that limited sellers' ability to apply demand driven pricing. However, this research shows that consumers accept demand driven pricing as a common practice in the hotel industry for a certain level of price increase during high demand situations. The fairness principle proposed by Kahneman and his colleges (1986) is not as strong as it was, at least in the hotel industry.

This research identifies two factors that moderate fairness perceptions: external events and individual's involvement. This study confirms that external events function as a contextual factor, affecting consumers' perceived price about a hotel stay. This study adapts hedonic and utilitarian consumption theories to extend the discussion on contextual effects on pricing. External events depending on hedonic vs. utilitarian situations influence consumers' perceived fair price of a hotel room differently. The results of Study 1 showed that consumers increased their perceived fair prices of the room rate from $100 to $129 for a hedonic event and $118 for a utilitarian event. The increase in perceived price could be interpreted as the contextual value of a hotel room rate. According to this interpretation, although both hedonic and utilitarian situations add perceived value to a hotel stay, a hedonic event adds more value to a hotel stay than a utilitarian event.

Second, this research extend the application of the theory of involvement to consumers' price fairness perceptions and reference price research in the hotel industry.

The findings of this research confirm the moderating role of involvement in consumers' response to dynamic pricing. Furthermore, this research elaborates the different consequences of the moderating effect of involvement between hedonic and utilitarian situations. It is noteworthy that utilitarian situations in which consumers engage in decision-making based on a logical information process enhance the moderating effect of involvement more than hedonic situations in which decisions rely heavily on an affective process (Hirshman & Holbrook, 1982; Richins & Bloch, 1986).

Lastly, the critical contribution of this research is the bivariate measurement of fairness and unfairness. The bivariate measurement enabled us to test separable activation of negative and positive evaluation, providing empirical evidence that fairness and unfairness are distinguishable and functionally independent. Two different constructs of fairness and unfairness enable researchers to identify the structural relationship amongst antecedent factors, fairness, unfairness and consequences in the different contexts.

The bivariate measurement of fairness and unfairness also allows us to capture the full range of consumers' price perceptions, including ambivalent perceptions. By using a binary scale or a bipolar scale of fairness and unfairness, respondents who have ambivalent perception might tend to choose the negative option due to negative bias (Cacioppo et al., 1997). However, the bivariate measurement allows people to evaluate the given price in both a positive way and negative way, thus capturing mixed (ambivalent) perceptions. The bivariate measurement also enables us to reduce negative bias. The bivariate measurement model can apply to testing attitudes (mixed attitude: positive attitude and negative attitude: Cacciopo & Bernston, 1994) and emotions (mixed emotion: sad and happy: Williams & Aaker, 2002). Therefore, this study suggests the

bivariate measurement as an adequate method to measure consumers' positive-negative mediation in hospitality and tourism research.

Marketing research often avoids mid-point and neutral responses, because many researchers consider mid-point responses to be meaningless (Dolnicar, 2013). Other words for neutral are "undecided" or "ambivalent." From the marketers' perspective, natural responses can be opportunistic targets that could change neutral positions to positive ones (or undecided ones to positive ones). While mid-point / neutral is considered to be a meaningless point in bipolar scales, it could be meaningful when using bivariate measurement. The bivariate measurement model enabled us to test separable activation of negative and positive evaluation, providing empirical evidence that fairness and unfairness are distinguishable and functionally independent. Two different constructs of fairness and unfairness enable researcher to identify structural relationship amongst antecedent factors, fairness, unfairness and consequences in the different contexts.

The bivariate measurement of fairness and unfairness also allows us to capture full ranges of consumers' price perceptions. It enables to identify ambivalent perceptions. By using a binary scale of fairness and unfairness, ambivalent perceptions might belong to the unfairness perceptions. Due to the negative bias, people tend to choose negative option if they have mixed perceptions. However, the bivariate measurement allows people to evaluate the given price in positive way and negative way; it could capture the mixed (ambivalent) perceptions. The bivariate measurement also enables to reduce the negative bias. The bivariate measurement model can apply to test attitudes (mixed attitude: positive attitude and negative attitude: Cacciopo & Bernston, 1994) and emotions (mixed emotion: sad and happy: Williams & Aaker, 2002).

Therefore, this study suggest the bivariate measurement as an adequate method to measure consumers' positive-negative mediation in the hospitality and tourism research.

This dissertation also offered several practical implications for the hotel industry, CVB (Convention and Visitors Bureau), local governments (destination marketing organization), and consumers. In reality, during times of excess demand, consumers' perceived price fairness/unfairness or consumers' booking intention might appear to be irrelevant in the short term because hotel rooms could be fully booked by consumers who pay a premium to book a hotel room to enjoy a favorite event night or to escape an uncomfortable / inconvenient situation (i.e., severe weather). However, it is of practical importance to note that external events increase consumers' perceived price of a hotel stay. In particular, the results of this study showed that the effect of hedonic events is larger than the effect of utilitarian events on consumers' perceived price of a hotel stay. When hotels can maintain high room rates due to external events over time, it helps hotels increase their reference price (Viglia, Mauri, & Carricano, 2016). Therefore, hotels should collaborate with local government and event organizers to create more hedonic rather than utilitarian events such as sporting, entertainment, local festivals, and musical events to promote demand, which increases hotel room rates and thereby helps hotels increase their reference prices.

The critical implication of this research for hotel operators and managers is that in the utilitarian situation consumers' unfairness perceptions do not negatively affect booking intentions. Although consumers perceive an expensive hotel room rate to be unfair, they would book a hotel anyway. In this case, while consumers' unfairness perception does not function to control the level of demand, hotels might nevertheless

face the serious and notorious problem of price gouging. Hotel managers heavily rely on a hotel revenue management system, a sophisticated and complicated computer program to set optimal room rates based on the demand forecast (El Gayar et al., 2011). By tracking current booking activities, a hotel revenue management system changes room rates every second (Ivanov & Zhechev, 2012). So if consumers book a hotel room in spite of their unfairness perceptions about high room rates, the revenue management system will keep raising room rates to maximize revenue and profit. If hotel revenue management managers only rely on this system, they may unwittingly indulge in price gouging.

The non-significant relationship between perceived unfairness and booking intentions could be interpreted as allowing hotel operators to ignore consumers' unfairness perceptions during a utilitarian situation. According to Maxwell (2002), the relative power of the buyer and seller influences fair/unfair relationships. If consumers have alternative options, room rate increases might not tend to be perceived as unfavorably, or unfair. In these types of circumstances hotels might consider cooperating with local governmental and other public organizations and associations to accommodate consumers' needs for alternative housing. Public shelters or Airbnb could easily expand a limited supply of hotel rooms during high demand in utilitarian situations.

The uncertain and unpredictable relationship between perceived price unfairness and booking intentions could pose a potential risk to hotel managers. From a management perspective, it would be more difficult to handle consumers who reluctantly booked a room. Consumers who felt the price was unfair when they booked the hotel might have a negative mood when they stay or exhibit complicated behavioral responses (Rozin and

Royzman, 2001). Xia and her colleagues suggested (2004) that when unfairness perceptions accompany negative emotions, the consequences could be more severe. Therefore, in the utilitarian situation, hotel operators and managers should make extra efforts to prevent any unpredictable risk.

The bivariate nature of consumers' fairness and unfairness perceptions could provide practical implications for hotel managers and marketers. The bivariate structure of fairness and unfairness demonstrated that consumers might have ambivalent perceptions of fairness and unfairness. Hotel managers should consider consumers perceived fairness and unfairness separately with awareness of the fact that consumers do not necessarily have simply fair or unfair judgments about hotel room rates. When people have ambivalent perceptions, fairness perceptions are more powerful than unfairness in driving them to have positive behavioral response. Therefore, hotel management might consider promoting perceived fairness rather than reducing perceived unfairness.

This dissertation discovered that different levels of involvement moderate the relationship among price increases, perceptions of fairness and unfairness, and booking intentions. High-involvement consumers have a less sensitive perception of fairness and unfairness in regard to price increases. This implies that the more the consumer is involved in hotels' dynamic pricing and booking situation, the more likely s/he is to have other criteria for making a booking decision. Thus, the hotel management should build a close relationship with the customers to provide various information to be stored in the consumers' memory and activated when the consumer makes booking decisions.

This research showed that perceived price unfairness has no significant effect on booking intentions in the utilitarian situation. However, it should not be interpreted to

mean that hotel operators can ignore perceived price unfairness in utilitarian situations. This study did not measure negative behavioral responses such as negative word of mouth and consumer complaints. In utilitarian situations, particularly in case of excess demand, hotel operators and managers should rather consider that they may have customers who begrudgingly book a hotel room because they need a place to stay. Although this research did not explore the long-term impact of customers' feeling forced to accept an unfair option, it is important to consider both short-term and long-term impacts of consumers' responses to dynamic pricing.

This study manipulated price increase situations that occur due to excess demand. The excess demand situations were designed to be a sporting event and a weather-related event. In real life, although weather-related events are beyond human control, most external events can be planned and managed by cooperating with local government (such as the Convention and Visitors bureau) or event organizers. Not only hotel managers, but also professionals and organizations in event management, can collaborate with the hotel industry to create and host large events to promote travel and boost hotel demand. As high-involvement consumers are less sensitive to price increases, hosting large events that attract a large population of highly involved consumers will benefit hotels. Hotel managers should cooperate with event professionals to make events more relevant to attendees, so as to promote consumers' perceived price fairness and to reduce consumers' perceived price unfairness.

In sum, hotels should consider how dynamic pricing affects consumers differently depending on whether they have hedonic or utilitarian motivations, or, likewise, whether their involvement in booking situations is high or low.

5.5 Limitations and Suggestions for Future Research

Several limitations of this dissertation should be considered when interpreting the results for future studies. First, this research employed a sporting event and a weather-related event, representing a hedonic and a utilitarian situation, respectively. The manipulation check was conducted for the second and third studies, but not for the first study. However, these three studies use identical situations (sporting event and weather-related event) to manipulate a hedonic and a utilitarian situation and the manipulation check for the second study verified that scenario situations (sporting event and weather-related event) could represent hedonic and utilitarian situations, respectively.

Second, although this study pioneers an examination of the bivariate measurement for perceived fairness and unfairness in place of the traditional measurement using bipolar scales, terminology used in traditional measurement such as fair, reasonable, acceptable, justifiable for perceived fairness and unfair, unreasonable, unacceptable, unacceptable, and unjustifiable for perceived unfairness were used. Cacioppo et al. (1997) point out the need to minimize the possibility that participants may treat these unipolar scales as bipolar scales when using antonym pairs. To minimize the carry-over effect in the survey conducted for this study, participants were asked to recall the scenario situation before they were asked to indicate the magnitude of their unfairness perceptions. Nevertheless, the scales of perceived fairness and perceived unfairness were used in antonym pairs. This may have opened the possibility that participants treated these bivariate scales as bipolar scales. Therefore, future research should consider choosing the wording more carefully to clearly treat the study as one-dimensional bivariate scales rather than bipolar.

Third, this research was designed to test consumers' reactions to price increases in a mid-scale hotel. Thus, it is not appropriate to apply the results of this research to upscale or luxury hotel situations. Also, the study respondents were from a fairly specific population: more than 80% of the respondents usually stayed at an economy hotel or a mid-scale hotel. This limits generalization to the population and category of hotels presented in this study.

Fourth, there are a variety of events that cause excess demand in the hotel market such as sport 'participation' events (as opposed to 'watching' events), political events, concerts, academic conference, business conventions, and so on. The various types of events may have different characteristics and frame consumers' trip motivations. It would be recommended to test the application of the current research model to various types of events.

Lastly, this research did not include negative behavioral intentions such as negative word of mouth, complaining behavior, trip cancellation, etc. Since this study treats perceived fairness and unfairness separately, it could be beneficial to extend the relationship between fairness/unfairness and negative behavioral responses. The independent constructs of fairness and unfairness could have results that are more specific in the relationship with positive vs. negative behavioral responses.

REFERENCES

REFERENCES

Acock, A. C. (2013). Discovering structural equation modeling using Stata. *Stata Press books*.

Adams, S. J. (1963). Toward an understanding of inequity. *Journal of Abnormal and Social Psychology., 67*(5), 422-436.

Abrate, G., & Viglia, G. (2016) Strategic and tactical price decisions in hotel revenue management. *Tourism Management*, 55(August), 123-132.

Albattat, A. R., & Som, A. P. M. (2013). Emergency preparedness for disasters and crises in the hotel industry. *Sage Open*, July-September, 1-10.

Amazon Mechanical Turk. (2014). Service Summary. Retrieved from https://requester.mturk.com/tour.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103*(3), 411.

Andres-Martinez, M. E., Gomez-Borja, M.-A., & Modejar_Jimenez, J.-A. (2014). A model to evaluate the effects of price fairness perception in online hotel booking. *Electronic Consumer Research, 14*, 171-187

Bagozzi, R. P. (1977). Structural Equation Models in Experimental Research. *Journal of Marketing Research, 14*(2), 209-226.

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology, 5*(4), 323-370.

Bazerman, M. H., White, S. B., & Loewenstein, G. F. (1995). Perceptions of fairness in interpersonal and individual choice situations. *Current Directions in Psychological Science, 4*(2), 39-43.

Beldona, S., & Kwansa, F. (2008). The impact of cultural orientation on perceived fairness over demand-based pricing. *International Journal of Hospitality Management, 27*(4), 594-603. doi:10.1016/j.ijhm.2007.07.024

Beldona, S., & Namasivayam, K. (2006). Gender and demand-based pricing: differences in perceived (un) fairness and repatronage intentions. *Journal of Hospitality & Leisure Marketing, 14*(4), 89-107.

Biswas, A., & Blair, E. A. (1991). Contextual effects of reference prices in retail advertisements. *Journal of Marketing, 55*(3), 1-12.

Biswas, A., & Sherrell, D. L. (1993). The influence of product knowledge and brand name on internal price standards and confidence. *Psychology & Marketing, 10*(1), 31-46.

Bloch, P. H., & Richins, M. L. (1983). A theoretical model for the study of product importance perceptions. *The Journal of marketing*, 69-81.

Bolton, L. E., Warlop, L., & Alba, J. W. (2003). Consumer perceptions of price(un)fairness. *Journal of Consumer Research, 29*(March), 474-491.

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk a new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science, 6*(1), 3-5.

Caciopro, J. T., & Bernston, G. G. (1994). Relationship between attitudes and evaluative space: A critical review, with Emphasis on the separability of positive and negative substrates. *Psychological Bulletin, 115*(3), 401-423.

Cacioppo, J. T., Gardner, W. L., & Berntson, G. G. (1997). Beyond bipolar conceptualizations and measures: The case of attitudes and evaluative space. *Personality and Social Psychology Review, 1*(1), 3-25.

Cacioppo, J. T., & Petty, R. E. (1979). Effects of message repetition and position on cognitive response, recall, and persuasion. *Journal of Personality and Social Psychology, 37*(1), 97

Campbell, M. C. (1999a). Perceptions of price unfairness: Antecedents and consequences. *Journal of Marketing Research, 36*(2), 187-199.

Campbell, M. C. (1999b). Why did you do that? The important role of inferred motive in perceptions of price fairness. *Journal of Product & Brand Management, 8*(2), 145-152.

Campbell, M. C. (2007). Says who? How the source of price information and affect influence perceived price (un)fairness. *Journal of Marketing Research, 44*(2), 261-271.

Celsi, R. L., & Olson, J. C. (1988). The role of involvement in attention and comprehension processes. *Journal of Consumer Research,* 210-224.

Chalonder, K., & Larntz, K. (1989). Optimal Baysian design applied to applied to logistic regression experiments. *Journal of Statistical Planning and Inference, 21,* 191-208.

Chandrashekaran, R. (2012). Consumers' utilization of reference prices: the moderating role of involvement. *Journal of Product & Brand Management, 21*(1), 53-60.

Chandrashekaran, R., & Grewal, D. (2003). Assimilation of advertised reference prices: the moderating role of involvement. *Journal of Retailing, 79*(1), 53-62.

Choi, S., & Mattila, A. (2003). Hotel revenue management and its impact on customers' perceptions of fairness. *Journal of Revnue and Pricing Management, 2*(4).

Choi, S., & Mattila, A. S. (2005). Impact of information on customer fairness perceptions of hotel revenue management. *Cornell Hotel and Restaurant Administration Quarterly, 46*(4), 444-451.

Choi, S., & Mattila, A. S. (2009). Perceived fairness of price differences across channels: The moderating role of price frame and norm perceptions. *Journal of Marketing Theory and Practice, 17*(1), 37-48.

Chung, J. Y., & Petrick, J. F. (2015). Measuring price fairness: Development of a multidimentional scale. *Journal of Travel & Tourism Marketing, 32*(7), 907-922.

Clarke, K., & Belk, R. W. (1978). The effects of product involvement and task definition on anticipated consumer effort. *Advances in Consumer Research, 5*(1), 313-318.

Dolnicar, S. (2013). Asking good survey questions. *Journal of Travel Research, 52*(5), 551-574.

Dolnicar, S., Grun, B., & Leisch, F. (2011). Quick, simple and reliable: Forced binary survey questions. *International Journal of Market Research, 53*(2), 231-251.

El Gayar, N. F., Saleh, M., Atiya, A., El-Shishiny, H., Zakhary, A. A., & Habib, H. A. (2011) An integrated framework for advanced hotel revenue management. *International Journal of Contemporary Hospitality Management*, 23(10), 84-98.

Farahmand, M., & Chatterjee, A. (2008). The case for dynamic pricing. *Hospitality Upgrade,* 154-155.

Fehr, E., & Gachter, S. (2000). Fairness and retaliation; The economics of reciprocity. *Journal of Economic Perspectives, 14*(3), 159-181.

Finkel, N. J., Harre, R., & Lopez, J.-L. R. (2001). Commonsense morality across cultures: Notions of fairness, justice, honor and equity. *Discourse Studies, 3*(1), 5-27.

Giberson, M. (2011). The problem with price gouging law. *Regulation, Spring,* 48-53.

Gupta, S. (2014). SEM for experimental designs: An information system example. The *Eletronic Journal of Business Research Methods, 12*(1), 27-40.

Haddad, R. E., Hallak, R., & Assaker, G. (2015). Price fairness perceptions and hotel customers' behavioral intentions. *Journal of Vacation Marketing, 21*(3), 262-276.

Haws, K. L., & Bearden, W. O. (2006). Dynamic pricing and consumer fairness perceptions. *Journal of Consumer Research, 33*(3), 304-311.

Heo, C. Y., & Lee, S. (2009). Application of revenue management practices to the theme park industry. *International Journal of Hospitality Management, 28*(3), 446-453. doi:10.1016/j.ijhm.2009.02.001

Heo, C. Y., Lee, S., & Matila, A. (2013). Restaurant revenue management: do perceived capacity scarcity and price differences matter? *International Journal of Hospitality Management, 35,* 316-326.

Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic Consumption: Emerging concepts, methods and propositions. *Journal of Marketing, 46*(3), 92-101.

Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *Journal of Consumer Research, 9*(2), 132-140.

Homburg, C., Hoyer, W. D., & Koschate, N. (2005). Customers' reactions to price increases: Do customer satisfaction and perceived motive fairness matter? *Journal of Academy of Marketing Sicence, 33*(1), 36-49.

Ivanov, S., & Zhechev, V. (2012). Hotel revenue management: A critical literature review. *Tourism Review*, 60(2), 175-197.

Jordan, N. (1965). The asymmetry of liking and disliking. A phenomenon meriting further reflection and research. *Public Opinion Quarterly, 29,* 315-322.

Kahneman, D. (1992). Reference points, anchors, norms, and mixed feelings. *Organizational and Human Decision Processes, 51,* 296-312.

Kahneman, D., & Tversky, A. (1979). Prospect Theory. *Econometrica, 47*(2), 263-292.

Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1986a). Fairness as a constraint on profit seeking: Entitlements in the market. *The American economic review, 76*(4), 728-741.

Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1986b). Fairness and the assumption of economics. *The Journal of Business, 59*(4), S285-S300.

Kahneman, D., & Miller, D. T. (1986). Norm theory: Comparing reality to its alternatives. *Psychological Review, 93*(2), 136-153.

Kalapurakal, R., Peter, D. R., & Urbany, J. E. (1991). Perceived price fairenss and duel entitlement. *Advances in Consumer Research, 18*(1), 1-18.

Kalyanaram, G., & Winder, R. S. (1995). Empirical genralizations from reference price research. *Marketing Science, 14*(3), 161-169.

Kanouse, D. E. (1984). Explaning negativity baises in evaluation and choice behavior: Theory and Resesarch. *Advances in Consumer Research, 11*(1), 703-708.

Kimes, S. E. (1989a). The basics of yield management. *Cornell Hotel and Restaurant Administration Quarterly, 30*(3), 14-19.

Kimes, S. E. (1989b). Yield management: a tool for capacity-considered service firms. *Journal of operations management, 8*(4), 348-363.

Kimes, S. E., & Wirtz, J. (2003). Has revenue management become acceptable? Findings from an international study on the perceived fairness of rate fences. *Journal of Service Research, 6*(2), 125-135.

Kirk, R. E. (2014). *Experimental Design: Procedures for the behavioral sciences* (4th ed.): SAGE Publication, Inc.

Litvin, S. W., Smith, W. W., & Blackwell, C. (2012). Current issue in tourism letter: Destination marketing, accommodation taxes, and mandated tourism promotional expenditures: may be time to reconsider. *Current Issue in Tourism, 15*(4), 385-390.

Lupfer, M. B., Weeks, K. P., Doan, K. A., & Houston, D. A. (2000). Folk conceptions of fairness and unfairness. *European Journal of Social Psychology, 30*, 405-428.

Martins, M., & Monroe, K. B. (1994). Perceived price fairness: A new look at an old construct. *Advances in Consumer Research, 21*(1).

Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. *Behavior research methods, 44*(1), 1-23

Mauri, A. G. (2007). Yield management and perceptions of fairness in the hotel business. *International Review of Economics, 54*(2), 284-293.

Maxwell, S. (2002). Rule-based price fairness and its effect on willingness to purchase. *Journal of Economic Psychology, 23*, 191-212.

Meng, X.-L., Rosenthal, R., & Rubin, D. B. (1992). Comparing correlated correlation coefficients. *Psychological Bulletin, 111*(1), 172.

Meyer, D. W. (2006). The virtues of price gouging. Working paper. Retrieved from www.ftc.gov/be/otherdocuments/meyergouging.pdf.

Meyers-Levy, J., & Peracchio, L. A. (1996). *Moderators of the impact of self-reference on persuasion. Journal of Consumer Research, 22*, 408-423.

Monroe, K. B. (2003). *Pricing: Making profitable decisions* (3rd ed.). Burr Ridge, IL: McGraw-Hill/Irwin.

Monroe, K. B. (2012). Price and customers' perceptions of value. In G. E. Smith (Ed.), *Visionary Pricing; Reflections and Advances in Honors of Dan Nimer* (Vol. 19, pp. 129-152): Advances in Business Marketing and Purchasing.

Noone, B. M., & Mattila, A. S. (2009). Hotel revenue management and the Internet: The effect of price presentation strategies on customers' willingness to book. *International Journal of Hospitality Management, 28*(2), 272-279.

Noone, B., & Mount, D. J. (2009). The effect of price on return intentions: Do satisfaction and reward program membership matter? *Journal of Revenue and Pricing Management, 7*(4), 357-369.

Norris, C. J., Gollan, J., Berntson, G. G., & Cacioppo, J. T. (2010). The current status of research on the structure of evaluative space. *Biological psychology, 84*(3), 422-436.

Oh, H. (2003). Price fairness and its asymmetric effects on overall price, quality, and value judgements: the case of an upscale hotel. *Tourism Management, 24*, 387-399.

Okun, A. M. (1981). *Prices and quantities: A macroeconomic analysis.* Washington, D.C.: Brookings Institution Press.

Park, D.-H., Lee, J., & Han, I. (2007). The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. *International Journal of Electronic Commerce, 11*(4), 125-148.

Petty, R. E., & Cacioppo, J. T. (1979). Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *Journal of Personality and Social Psychology, 37*(10), 1915.

Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, 135-146.

Podsakeoff, P. M., MacKenzie, S. B., & Podsakoeff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual review of psychology, 63*, 539-569.

Ponchione, A. (2012 December 12). Price gouging ambiguities weigh on hoteliers. *HotelNewsNow.* Retrieved from http://hotelnewsnow.com/Articles/9545.

Richins, M. L., & Bloch, P. H. (1986). After the new wears off: The temporal context of product involvement. *Journal of Consumer Research*, 280-285.

Russell, D. W., Kahn, J. H., & Almaier, E. M. (1998). Analyzing data from experimental studies: A latent variable structural equation modeling approach. *Journal of Councelling Psychology, 45*(1), 18-29.

Roster, C. A., Rogers, R. D., Hozier, G. C., Baker, K. G., & Albaum, G. (2007). Management of marketing research projects: Does delivery method matter anymore in survevy research? *Journal of Marketing Theory and Practice, 15*(2), 127-144.

Rothemberg, J. J. (2011). Fair pricing. *Journal of the European Economic Association, 9*(5), 952-981.

Rozin, P., & Royzman, E. B. (2001). Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review, 5*(4), 296-320.

Smith, S. M., Haugtvedt, C. P., & Petty, R. E. (1994). Attitudes and recycling: Does the measurement of affect enhance behavioral prediction? *Psychology and Marketing,* 11, 359-374.

Taylor, S. E., & Fiske, S. T. (1978). Salience, attention, and attribution: Top of the head phenomena. *Advances in Experimental Social Psychology, 11 (4),* 249-288.

Taylor, W., & Kimes, S. E. (2011). The effect of brand class on perceived fairness of revenue management. *Journal of Revenue & Pricing Management, 10*(3), 271-284.

Thaler, R. (1985). Mental accounting and consumer choice. *Marketing Science, 4*(3), 199-214.

Thurstone, L. L. (1929). Theory of attitude measurement. *Psychological Review, 36*(3), 222.

Urbany, J. E., Madden, T. J., & Dickson, P. R. (1989). All's not fair in pricing: an initial look at the dual entitlement principle. *Marketing Letters, 1*(1), 17-25.

Vaidyanathan, R., & Aggarwal, P. (2003). Who is the fairest of them all? An attiributional approach to price fairness perceptions. *Journal of Business Research, 56,* 453-463.

Varki, S., & Colgate, M. (2001). The role of price perceptions in an integrated model of behavioral intentions. *Journal of Service Research, 3*(3), 232-240.

Viglia, G., Mauri, A., & Carricano, M. (2016). The exploration of hotel reference prices under dynamic pricing scenarios and different forms of competition. *International Journal of Hospitality Management*, 52, 46-55.

Voss, K. E., Spangenberg, E. R., & Grohmann, B. (2003). Measuring the hedonic and utilitarian dimensions of consumer attitude. *Journal of Marketing Research, 40*(August), 310-320.

Wakefield, K. L., & Inman, J. J. (2003). Situational price sensitivity: The role of consumption occasion, social context and income. *Journal of Retailing, 79*, 199-212.

Wharton, S. (2012 November 5). Hotel exhibit role in society during crises. *Hotelnewsnow*. Retrieved from http://www.hotelnewsnow.com/Article/9302/Hotel-exhibit-role-in-society-during-crises.

Wikinson, L. (1999). Statistical methods in psychology journals: Guidelines and explanations. *American Psychologist, 54*(8), 594-610.

Williams, P., & Aaker, J. L. (2002). Can mixed emotions peacefully coexist? *Journal of Consumer Research, 28*(4), 636-649.

Wilson, T. D., Lindsey, S., & Schooler, T. Y. (2000). A model of dual attitudes. *Psychological Review, 107*(1), 101-126.

Wirtz, J., & Kimes, S. E. (2007). The moderating role of familiarity in fairness perceptions of revenue management pricing. *Journal of Service Research, 9*(3), 229-240.

Xia, L., Monroe, K. B., & Cox, J. L. (2004). The price is unfair! A conceptual framework of price fairness perceptions. *Journal of Marketing* (1), 1-15.

Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 341-352.

APPENDICES

Appendix A Survey I for the Study 1

Dear Participants,

We are conducting a research project to examine how consumers respond to hotels' room rate increases. The results of this study would contribute significantly to the understanding of consumer perceived unfairness towards hotel room rate pricing practices.

The participants for this survey should be 18 years or older. The survey for this research is voluntary, anonymous, and the participants can stop at any time if necessary. Further, the participants can skip any questions, which they do not want to answer. It will take less than 10 minute(s) to complete the enclosed survey.

All responses will be kept anonymous as well as confidential. Also, we will not use responses for other purposes. Once again, we hope that you understand your participation is critical to the success of this research. If you have any question or need more information about this survey, please contact to Eunjoo Kang (kang126@purdue.edu) or Dr. Chun-Hung(Hugo) Tang (tang14@purdue.edu).

Sincerely,
Eunjoo Kang

ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE IRB OFFICE AT THE PURDUE UNIVERSITY (irb@purdue.edu).

I have read and understood the above consent form and desire of my own free will to participate in this study.

- o Yes
- o No

If No Is Selected, Then Skip To End of Survey

We are interested in your perceptions towards the hotel industry's pricing practices as a consumer.

Please read the following scenario carefully and respond to the questions by imagining how you think that you would react in the described situation.
(Randomized selection algorithm: hedonic/utilitarian x magnitude of price increases)

Scenario – hedonic event

> Imagine that you are planning a trip to watch your favorite professional football team play. You plan to stay the night. You have identified a mid-scale hotel where you want to stay. You know the average room rate for this hotel is $100.
>
> Because of the football game, the hotel is expected to be fully booked on the night of your stay. When you are trying to book a room, you find out the rate to be $120 / $140 / $160 / $180 / $200 per night.

Scenario – utilitarian event

> Imagine that your neighborhood area is flooded and your house has lost power due to a storm. You are planning to stay in a hotel for the night to avoid the inconvenience of staying at your flooded house. You have identified a mid-scale hotel where you want to stay for the night. You know the average room rate for this hotel is $100.
>
> Because this hotel has not been affected by the storm, the hotel is expected to be fully booked for the night of your stay. When you are trying to book a room, you find out the rate to be $120 /$140 / $160 / $180 / $200 per night.

1. Do you think this given room rate is fair?

- ❍ Unfair
- ❍ Fair

If unfair is selected, then skip to question #2. If fair is selected, then skip to Question #3.

2. How fair do you think this room rate change is?

- ❍ Neutral
- ❍ Somewhat Fair
- ❍ Fair
- ❍ Very fair
- ❍ Extremely fair

3. How unfair do you think this room rate change is?

- ❍ Neutral
- ❍ Somewhat unfair
- ❍ Unfair
- ❍ Very unfair
- ❍ Extremely unfair

4. What price you would consider to be fair? (Please adjust the slider)

_____ US $

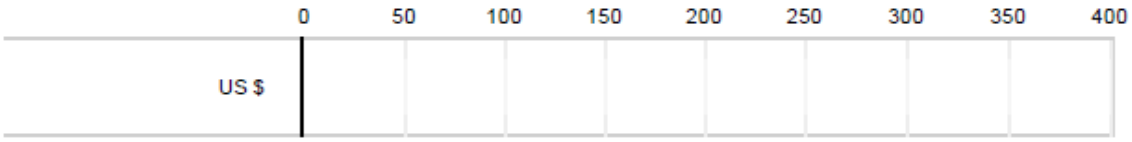
5. Would you book a room in this hotel under the described circumstance?

- ❍ Very unlikely 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ Very likely 5

6. What is the highest rate you would be willing to pay under the described circumstance?

(Please adjust the slider)

_____ US $



7. How many times have you stayed at a hotel in the past 12 months?

- ❍ No
- ❍ 1-2
- ❍ 3-4
- ❍ 5-6
- ❍ 7-8
- ❍ 9-10
- ❍ More than 10

8. When staying at hotels in the past year, what type of hotel have you usually stayed?

- ❍ Luxury hotels
- ❍ Upscale hotels
- ❍ Mid-scale hotels
- ❍ Economy hotels
- ❍ Budget hotels

9. How often do you use the Internet to book a hotel room?

- ❍ Never
- ❍ Less than a half of my trips
- ❍ Half of my trips
- ❍ More than half of my trips
- ❍ Always

10. What best describe your purpose of staying hotels in most of your trips?

- ❍ Business trip
- ❍ Leisure travel
- ❍ Visiting family or friends
- ❍ Other (Please specify) _____

11. Have you ever observed that hotels change room rate from time to time?

- ❍ Yes
- ❍ No

12. Are you familiar with the hotel industry's practice of dynamic pricing?

- ❍ Very unfamiliar 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ Very familiar 5

13. In your opinion, which of the following are examples of a hotel's dynamic pricing practice? (Select all that apply)

- ❑ At downtown hotels, weekday rate are more expensive than weekend rate.
- ❑ A hotel offers a lower room rate for groups than for an individual guest.
- ❑ A hotel offers one week staying package which is cheaper than daily charge for one week.
- ❑ It is cheaper to book a hotel one month prior to the actual stay than one week prior to the actual day.

14. Would you agree that governments should control hotel room rates during natural disasters or emergencies?

- ❍ Very Unlikely 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ Very Likely 5

15. What is your gender?

- ❍ Male
- ❍ Female

16. What year were you born? _____

17. What is your current marital status?

- ❍ Single
- ❍ Married without children
- ❍ Married with children
- ❍ Divorced
- ❍ Separated

18. What is the highest level of education you have completed?

- ❍ High School or equivalent
- ❍ 2-year college degree
- ❍ 4-year college degree
- ❍ Graduate / Professional degree
- ❍ Other _____

19. What is your current employment status? (Check all that apply)

- ❑ Student
- ❑ Employed (part-time)
- ❑ Employed (full-time)
- ❑ Unemployed
- ❑ Retired
- ❑ Homemaker
- ❑ Other (Please specify) _____

20. What is your annual income?

- ❍ Less than $20,000
- ❍ $20,001 - $40,000
- ❍ $40,001 - $60,000
- ❍ $60,001 - $80,000
- ❍ $80,001 - $100,000
- ❍ More than $100,000

21-a. What situation did you imagine when you answer the questions?

- ❍ NFL (National Football League) game
- ❍ MLS (Major League Soccer) game
- ❍ College Football game

21-b. What situation did you imagine when you answer the questions?

- ❍ Earthquake
- ❍ Storm
- ❍ Tsunami

22. Based on your understanding, the scenario is about:

- ❍ Price increases
- ❍ Price discounts
- ❍ Tourism package

Thank you for participating in this survey.

Appendix B Survey II for Study 2 and 3

Dear Participants,

We are conducting a research project to examine how consumers respond to hotels' room rate increases. The results of this study would contribute significantly to the understanding of consumer perceived unfairness towards hotel room rate pricing practices.

The participants for this survey should be 18 years or older. The survey for this research is voluntary, anonymous, and the participants can stop at any time if necessary. Further, the participants can skip any questions, which they do not want to answer. It will take less than 10 minute(s) to complete the enclosed survey.

All responses will be kept anonymous as well as confidential. Also, we will not use responses for other purposes. Once again, we hope that you understand your participation is critical to the success of this research. If you have any question or need more information about this survey, please contact to Eunjoo Kang (kang126@purdue.edu).

Sincerely,
Eunjoo Kang

ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE IRB OFFICE AT THE PURDUE UNIVERSITY (irb@purdue.edu).

I have read and understood the above consent form and desire of my own free will to participate in this study.

- Yes
- No

If No Is Selected, Then Skip To End of Survey

How many times have you stayed at a hotel in the past 12 months?

- ❍ None
- ❍ 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7
- ❍ 8
- ❍ 9
- ❍ 10
- ❍ More than 10

When staying at hotels in the past year, what type of hotel have you usually stayed?

- ❍ 1 star hotel
- ❍ 2 star hotel
- ❍ 3 star hotel
- ❍ 4 star hotel
- ❍ 5 star hotel

How often do you use the Internet to book a hotel room?

- ❍ Never
- ❍ Rarely
- ❍ Sometimes
- ❍ Most of the Time
- ❍ Always

Which site have you visited most often when you book a hotel room?

- ❍ Hotel websites (Marriott.com, Hilton.com, Starwoodhotels.com, ihg.com, holidayinn.com, etc)
- ❍ Opaque sites (Hotwire, Priceline, etc)
- ❍ Merchants sites (Expedia, Orbitz, etc)
- ❍ Credit card sites
- ❍ Others _____

What best describes your purpose of staying hotels in most of your trips?

- ❍ Business trip
- ❍ Leisure travel
- ❍ Visiting family or friends
- ❍ A combination of business & leisure
- ❍ Other (Please specify) _____

Have you ever observed that hotels' room rates change from time to time?

- ❍ Yes
- ❍ No

Are you familiar with the hotel industry's practice of dynamic pricing?

Note: Dynamic pricing means adjusting the room rates based on the demand needs at a particular situation.

- ❍ Very Unfamiliar 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ Very Familiar7

Which of the following situations have you observed or experienced? *(Select all that apply)*

- ❑ At downtown hotels, weekday rate are more expensive than weekend rate.
- ❑ During a special event, hotel room rates are increased.
- ❑ A hotel offers a one week stay package which is cheaper than daily charge for one week.
- ❑ It is cheaper to book a hotel one month prior to the actual stay than one week prior to the actual day.
- ❑ When a city holds a professional sporting event, hotel room rates are increased.

We are interested in your perceptions towards the hotel industry's pricing practices as a consumer. Please read the following scenario carefully and respond to the questions by imagining how you think that you would react in the described situation.

*** This survey includes a question to examine if you fully understand the given scenario situation. If you do not understand the given situation, your answers are meaningless. Therefore you may not be able to receive the survey completion code if you fail to the validation question. Please read the following scenario and answer the questions carefully.* (Randomized selection algorithm: hedonic/utilitarian event)

Scenario – hedonic event

Imagine that you were planning a trip to watch your favorite professional sports teams play. You were planning to stay in a hotel for the game night. You found a 3 star hotel that satisfied your needs. Typically, you know that the average room rate for this type of hotel is $100.
Due to the football game, all hotels were expected to be fully booked on the game night.

Scenario – utilitarian event

Imagine that your neighborhood area were flooded and had power outage due to a storm. You are planning to stay in a hotel for the night as an alternative

housing. You found a 3 star hotel that satisfied your needs. Typically, you know the average room rate for this type of hotel is $100.
Due to the storm, all hotels were expected to be fully booked for the night of your stay.

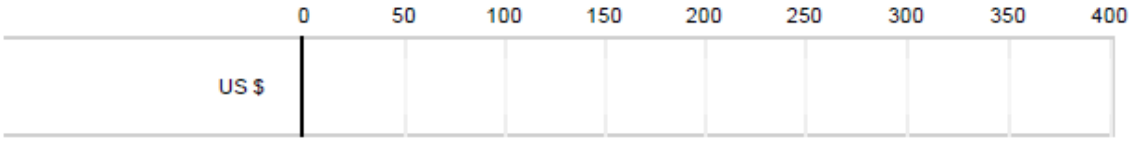
How would you perceive staying in a hotel in this given situation?

	Strongly Disagree1	2	3	Neutral4	5	6	Strongly Agree7
Effective	❍	❍	❍	❍	❍	❍	❍
Helpful	❍	❍	❍	❍	❍	❍	❍
Functional	❍	❍	❍	❍	❍	❍	❍
Necessary	❍	❍	❍	❍	❍	❍	❍
Practical	❍	❍	❍	❍	❍	❍	❍
Fun	❍	❍	❍	❍	❍	❍	❍
Exciting	❍	❍	❍	❍	❍	❍	❍
Delightful	❍	❍	❍	❍	❍	❍	❍
Thrilling	❍	❍	❍	❍	❍	❍	❍
Enjoyable	❍	❍	❍	❍	❍	❍	❍

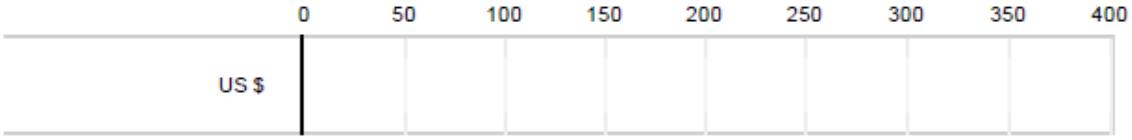
How would you feel about staying in a hotel in this given situation?

	Strongly Disagree 1	2	3	Neutral 4	5	6	Strongly Agree 7
It is very important to stay in a hotel in this situation.	❍	❍	❍	❍	❍	❍	❍
I would really want to stay in a hotel in this situation.	❍	❍	❍	❍	❍	❍	❍
Staying in a hotel in this situation really matters to me.	❍	❍	❍	❍	❍	❍	❍

What hotel room price would you consider fair in this given situation? Please adjust the slider. _____ US$



What is the highest rate you would be willing to pay under the described circumstance? Please adjust the slider. _____ US$



Scenario – price increases [Randomized selection algorithm]

When you were trying to book a room, you find out the rate to be $120 /$140 / $160 / $180/ $200 per night, which is $20 / $40 / $60 / $80 / $100 above the average.

Please remember the given situation, answer to the questions. Unless you could remember the scenario correctly, your answers would be useless and you will not be able to receive the completion code.

What situation did you envision when you answered the questions?

- ❍ Sporting event
- ❍ Storm
- ❍ Leisure travel
- ❍ Hurricane
- ❍ Vacation
- ❍ Music concerts

How would you feel about the increased room rate in this described situation?

	Strongly Disagree 1	2	3	Neutral 4	5	6	Strongly Agree 7
The increased room rate seems **reasonable**.	❍	❍	❍	❍	❍	❍	❍
The increased room rate seems **acceptable**.	❍	❍	❍	❍	❍	❍	❍
The increased room rate seems **fair**.	❍	❍	❍	❍	❍	❍	❍
The increased room rate seems **justifiable.**	❍	❍	❍	❍	❍	❍	❍

Based on the given scenario, the actual room rate was more expensive than average hotel room rates by

- ❍ $20
- ❍ $40
- ❍ $60
- ❍ $80
- ❍ $100

How would you feel about the increased room rate under the described situation?

	Strongly Disagree 1	2	3	Neutral 4	5	6	Strongly Agree 7
The increased room rate seems **unreasonable.**	❍	❍	❍	❍	❍	❍	❍
The increased room rate seems **unacceptable.**	❍	❍	❍	❍	❍	❍	❍
The increased room rate seems **unfair.**	❍	❍	❍	❍	❍	❍	❍
The increased room rate seems **unjusfiable.**	❍	❍	❍	❍	❍	❍	❍

Would you book a room in this hotel under the described circumstance?

	Strongly Disagree 1	2	3	Neutral 4	5	6	Strongly Agree 7
I would like to book a room at the given room rate.	❍	❍	❍	❍	❍	❍	❍
I would be willing to book this hotel in the given situation.	❍	❍	❍	❍	❍	❍	❍
I will book a room at this hotel.	❍	❍	❍	❍	❍	❍	❍

What is your gender?

- ❍ Male
- ❍ Female

What is your age? _____

What is your current marital status?

- ❍ Single
- ❍ Married
- ❍ Divorced
- ❍ Separated

Are you a student?

- ❍ Yes
- ❍ No

What is the highest level of education you have completed?

- ❍ High School or equivalent
- ❍ 2-year college degree
- ❍ 4-year college degree
- ❍ Graduate / Professional degree
- ❍ Other _____

What is your current employment status?

- ❍ Employed (part-time)
- ❍ Employed (full-time)
- ❍ Unemployed
- ❍ Retired
- ❍ Homemaker
- ❍ Other (Please specify) _____

What is your annual income?

- ❍ Less than $20,000
- ❍ $20,001 - $40,000
- ❍ $40,001 - $60,000
- ❍ $60,001 - $80,000
- ❍ $80,001 - $100,000
- ❍ $100,001 - $120,000
- ❍ $120,001 - $140,000
- ❍ $140,001 - $160,000
- ❍ $160,001 - $180,000
- ❍ $180,001 - $200,000
- ❍ More than $200,001

In what state do you currently reside? _____

Based on your understanding, the scenario is about:

- ❍ Price increase
- ❍ Price discounts
- ❍ Tourism package

Thank you very much.

VITA

VITA

EUNJOO KANG

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Education

Ph.D. Hospitality and Tourism Management, 2016, Purdue University, USA
M.S., Hotel and Restaurant Management, 2010, University of Houston, USA
B.S., Political Science and Diplomacy, 1995, Foreign Studies of Hankuk University, Seoul, Republic of Korea

Eunjoo Kang was born in Seoul, South Korea in 1972. After graduating in Foreign Studies of Hankuk University, she worked as an event planner / manager, planning and executing a variety of event projects for the Korean government and Korean major companies in 16 different countries before she started her graduate study in Hotel and Restaurant Management. On June 13, 2016 Eunjoo Kang defended her dissertation for a doctoral degree in Hospitality and Tourism Management at Purdue University under the supervision of Dr. Sandra Sydnor.

She is interested in the impact of events on the hotel industry. Her research areas are pricing, price fairness perception, and consumer behavior.