The Effect of Service Duration and Price (Mis)Match on Perceived Price Fairness

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ABSTRACT

Although globalization allows travelers to choose from different transportation options and arrive to their destination in various times, hotels continue to rely on the traditional 3:00p.m. check-in and noon check-out times. would a guest perceive the rate as being fair when service durations and prices do not match either due to extra charges for early check-ins, late arrivals, or early check-outs? This study aims to investigate the effect of service duration and price matching on consumers' perceived price fairness. The findings of this study suggest that the service duration (mis)match and type of pricing jointly impact consumer perceptions of price fairness.

KEYWORDS: *service duration, price fairness, hotel check-in/check-out*

INTRODUCTION

"We were informed that the early check-in fee would be 50% of our room rate… I left with a bitter taste when I checked out at 5:45am two days later…. my room would be quick cleaned and the next traveler would be charged an extra US$200 or so to get in early even though I left early and, theoretically, was still paying for the room through check-out.

-SFTraveler10, 2007-

The testimonial above indicates the fact that this hotel had a pricing policy of charging 50% of the room rate for an early check-in. However, the guest recognizes that he/she was charged for the duration not spent at the hotel, specifically the duration between the time he/she checked out and the normal check-out time. The guest implies in the online testimonial that since the hotel charged extra for early arrival, he/she should be reimbursed for early check-out.

Although globalization allows travelers to choose from different transportation options and arrive to their destination in various times, hotels continue to rely on the traditional 3:00p.m. check-in and noon check-out times. Guests do not collectively arrive at 3:00 p.m., and yet, most guests pay the same rate regardless of their arrival time. In other words, they pay the same price for different service durations. For example, if a guest pays $210 for a 21 hour stay (3:00 p.m. to 12:00 p.m.), the guest is paying $10.00 per hour. If a guest arrives at the hotel at 10:00 p.m. and still pays $210 for 14 hour stay (10:00 p.m. to 12:00 p.m.), the guest is paying $15.00 per hour stay at the hotel. The question is then, would a guest perceive the rate as being fair when service durations and prices do not match either due to extra charges for early check-ins, late arrivals, or early check-outs? This study aims to investigate the effect of service duration and price matching on consumers' perceived price fairness.

Price Fairness Perceptions

Price fairness perceptions can be explained by a consumer's subjective sense that evaluates a price as right, just, or legitimate (Campbell, 2007), and these perceptions affect consumer behaviors which, in turn, influences firm profits (Campbell, 1999; Kahneman, et al., 1986a, b). A growing body of research is dedicated to understanding price fairness perceptions.

Kahneman, et al. (1986a, b) identified several conditions in which the price is perceived as fair or unfair. Their proposed concept of the principle of dual entitlement suggests that perceived unfairness results from a price increase if the firm benefits from it, however, when the firm's existing level of profit remains constant, the price increase is perceived to be fair. The concept of the principle of dual entitlement implies that price fairness is evaluated by a sense of a reference transaction, which is influenced by the price and other conditions of the sale. Xia, et al. (2004) argue that a price fairness perception is most likely to be developed based on comparative transactions that involve different parties. They also discuss that the degree of transaction similarity has a significant influence on price fairness perceptions.

Prior literature has identified several factors that affect consumer price fairness perceptions. However, the notion of price fairness in the context of the hotel industry is largely uncovered (Shoemaker & Mattila, 2009). The lodging industry practices dynamic pricing. Instead of charging a fixed price, the hotel industry often applies variable pricing (Kimes, 2009). The variable pricing practices associated with revenue management have increased the likelihood that customers will encounter different prices for the same service (Wirtz & Kimes, 2007). Likewise, customers are also likely to encounter different services as well as difference

durations of services for the same price. The following section will discuss the effect of service duration and hotel pricing on price fairness perceptions.

Service Duration and Price (Mis)Match

Hotel Pricing and Service Duration

Hotel customers do not arrive at a hotel collectively, however, hotels choose to rely on the orthodox of fixed check-in and check-out times. Room rates are typically charged on a nightly basis. Hotel guests do not get any discount for arriving late. However, they may be charged extra fees for early arrivals. We argue that service duration and price mismatch can negatively affect price fairness for two reasons.

First, prior literature argues that charging different prices for essentially the same product or service raises concerns about fairness when dynamic pricing strategies are evaluated by consumers (Garbario & Lee, 2003; Grewal et al., 2004). If one guest pays $200.00 for 20 hours and another customer pays $200.00 for a 10 hour stay, then one is paying $10.00 an hour and the other is paying $20.00 an hour. This indicates that the two customers are paying different prices for the same service. Price fairness literature indicates that the degree of transaction similarity has a significant influence on price fairness perceptions (Xia, et al., 2004). The comparative reference can be other customers as well as the guests themselves if consumers compare the current transaction with a past transaction. Service duration mismatch will results in a high degree of transaction dissimilarity which leads to price unfairness.

Second, one of the characteristics of services that differ from the characteristics of manufactured goods is perishability. Services such as hotel rooms are perishable and if the services are not sold, the revenue for those services is lost forever (Shoemaker & Mattila, 2009). Likewise, perishability of hotel rooms is relevant to customers. If a customer pays for 24 hours, the hotel room has to be used during that period of time. If the customer checks in late, the duration of time the room has not been used is perishable to the customer. The customer cannot keep the service or use it later.

Relative advantage (Gain versus Loss)

Price fairness perceptions can be influence by perceptions of advantaged inequality (i.e., the consumer pays less than the reference price) or disadvantaged inequality (i.e, the consumer pays more) (Xie et al., 2004). In the hotel context, this concept of advantage/disadvantage may emerge from early check-in charges. The hotel industry has unique pricing which applying additional fees for early check-in. However, early check-in fees are not always charged to customers: the fee may be applied due to high occupancy or may not be applied due to low occupancy. Applying the charges may also depend on the employee checking in the customer (e.g., the employee has the authority to remove the charge). If a customer checks in early with no additional charges, the customer may feel the price is cheaper than what it is supposed to be (a gain). On the other hand, if a customer is charged for early check-in, he/she may feel that the price is more expensive than what is supposed to be (a loss). Prospect theory also suggests that a positive change (or value) is considered a gain, while a negative change is considered a loss. According to principles of mental accounting (Thaler, 1985) and prospect theory (Kahneman & Tversky, 1979), the graph of the mathematical function for the value of losses is steeper than the function for the value of gains (Thaler, 1985). Being charged extra for early check-in is a negative change (loss) thus may raise the salience of service duration and price match/mismatch and increase its weight in evaluating price fairness. On the other hand, when no additional

charges are applied for early check-in, it is a positive change (gain) thus service duration and price match/mismatch may not be as salient. We also investigate the situation in which the customer does not need to check-in early. In this situation, the customer may not feel that there is a positive or negative change, however, since the customer is "giving up money to purchase the service" (Shoemaker & Mattila, 2009, p. 536) the transaction process may be seen as a "loss" rather than a "gain." Thus, we argue that consumers' price fairness perceptions of service duration and price match/mismatch will be similar to those of "loss" conditions. We also suggest that price fairness perceptions influence consumers' behavioral intentions such as return intention and intention to spread word of mouth. Accordingly, the following hypotheses are proposed:

H1: When early check-in fees are charged (loss condition), *mismatch* between service duration and price will lead to lower price fairness perceptions compared to when there is a *match* between service duration and price.
H2: When early check-in fees are not charged (gain condition), price fairness perceptions will be indifferent between service duration and price *mismatch* and *match*.
H3: When the early check-in fees are not relevant (control condition), the results will be similar to that of loss condition.
H4: Perceived price fairness will positively influence return intention and positive word of mouth (PWOM) and negatively influence negatively word of mouth (NWOM).

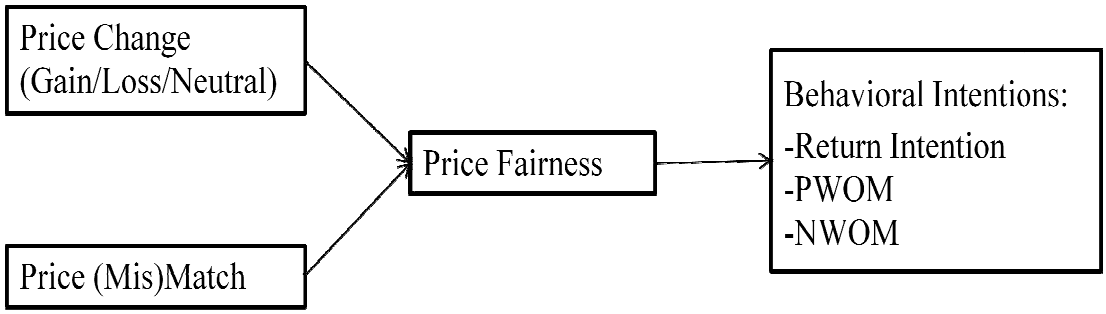

Figure 1. Research Framework

EMPIRICAL STUDY

Method

An experiment was designed to test the hypotheses. For experimental control, scenarios that manipulated service duration and price were utilized. Six scenarios were developed in the context of the hotel industry. Service duration was manipulated by check-in and check-out time. Price change (gain/loss) was manipulated by either charging or not charging early check-in fees. Participants were staff and faculty members working at a university in the U.S. A total of 141 participants completed the study. Each participant was randomly assigned to one of six scenarios (Table 1) and instructed to read and imagine a scenario describing a hotel experience.

Table 1. Check-in and Check-out times of six scenarios

	Asymmetric Effect **Service Duration and Price (Mis)Match**	
Price Change	Mismatch	Match
Gain (advantaged pricing) (no extra charge: $210)	C/I: 8 am (early) C/O: 12 pm (on time) Hrs: 28hrs	C/I: 8 am (early) C/O: 5 am (early) Hrs: 21hrs
Loss (disadvantaged pricing) (Surcharge: $210+$70)	C/I: 8 am (early) C/O: 5 am (early) Hrs: 21hrs	C/I: 8 am (early) C/O: 12 pm (on time) Hrs: 28hrs
Neutral (Control condition) (Fixed rate: $210)	C/I: 12 am (late) C/O: 12 pm (on time) Hrs: 12 hrs	C/I: 3 pm (on time) C/O: 12 pm (on time) Hrs: 21hrs

Note. C/I: check-in, C/O: check-out, Hrs: service duration in hours

Measures

Following the scenario, participants were asked to respond to various dependent measures (Table 2). All measurement items were on a 7-point Likert scale. For control purposes, standard norm of the pricing was measured.

Table 2. Measures

Variables	**Measures**	**Cronbach's Alpha**
Price fairness	How would you rate the price the hotel charged you? - (un)fair / (un)reasonable / (un)acceptable Vaidyanathan & Aggarwal (2003)	.905
Repurchase Intentions	If you were to go on a trip to the same destination in the future, how likely is it that you would stay at this hotel? - un(likely) / (im)possible / (im)probable	.987
PWOM	How likely is it that you would say positive things about the hotel to others? - un(likely) / (im)possible / (im)probable	.978
NWOM	How likely is it that you would say negative things about the hotel to others? - un(likely) / (im)possible / (im)probable	.983
Standard Norm	In your opinion, how common are the pricing practices described in the scenario? - un(common)	

Results

The Effect of Service Duration and Price (Mis)Match on Perceived Price Fairness

A 2 (service duration and price (mis)match: match vs. mismatch) by 3 (price change: gain, loss, neutral) ANOCA was conducted with perceived price fairness as a dependent variable and standard norm of hotel pricing as a covariate.

A significant two way interaction of *price change* and s*ervice duration and price (mis)match* was obtained (F[2,131]=6.322, $p< .01$). As Table 3 and Figure 2 illustrate, perceived price fairness following disadvantage pricing (loss) and neutral pricing (control) decreased with mismatch (versus match) between service duration and price. However, perceived price fairness following advantage pricing was not affected by mismatch between service duration and price, supporting H1, H2, and H3. In terms of the covariate, standard norm of pricing (F[1,131]=5.548, $p<.05$) was a significant predictor of perceived price fairness.

Table 3. Price Fairness: Price Change X Service Duration and Price (Mis)Match

Price Change	Price and Service Duration (Mis)Match	
	Mismatch (n=79)	Match (n=72)
Gain (n=55)		
Mean	5.578 a	5.198 a
SE	.23	.24
Loss (n=50)		
Mean	2.914 a	4.307 b
SE	.24	.25
Neutral (n=46)		
Mean	4.724 a	5.730 b
SE	.25	.27

Note. Using Holm's sequential bonferroni post hoc comparisons, within rows, means with no lower case subscript in common differ at p<.05.

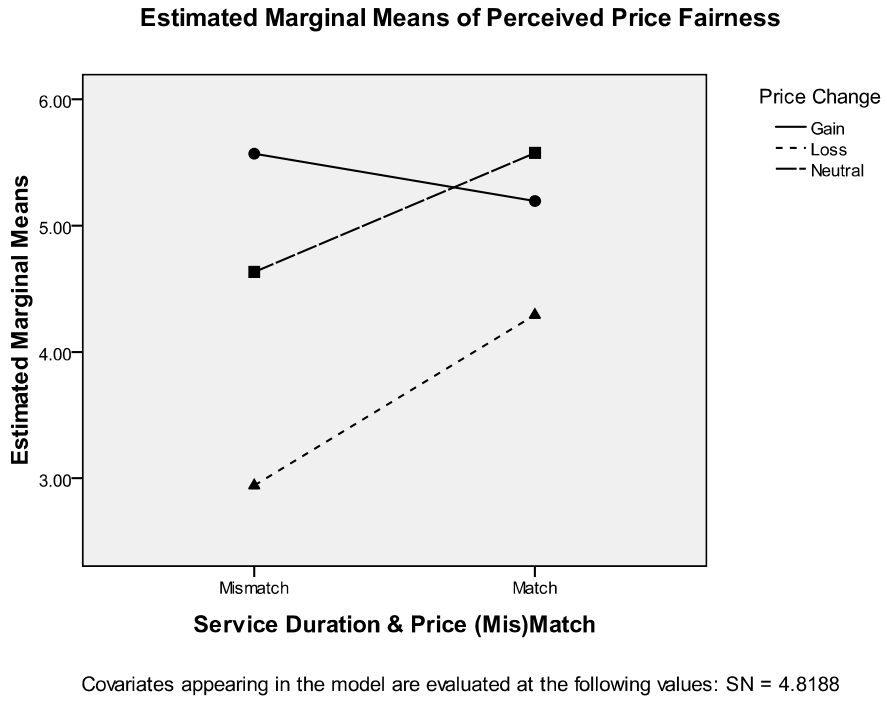

Figure 2. Interaction Plot

The Effect of Perceived Price Fairness on Behavioral Intentions

Linear regression analysis was conducted to understand the effect of price fairness on return intention, PWOM intention, and NWOM intention. As the results indicate (Table 4), perceived price fairness has a positive impact on return intention and PWOM intention and a negative impact on NWOM intention, supporting H4.

Table 4. Results of the Regression Analysis

Dependent Variables	Beta	t-value	Adjusted R^2	N
Return Intention	.676	11.037*	.45	146
PWOM	.651	10.395*	.42	148
NWOM	-.572	-8.460*	.32	148

Note. Independent variable is perceived price fairness, * $p < .001$.

DISCUSSION AND IMPLICATIONS

The findings of this study suggest that the service duration (mis)match and type of pricing jointly impact consumer perceptions of price fairness. Our results show that consumers are sensitive to a match between service duration and price when disadvantaged pricing is applied. When early check-in fees are charged, mismatch between price and service duration leads to significantly lower perceived price fairness than a match between price and service duration. A similar pattern was observed in the control condition when early check-in fees were not relevant. The findings indicate that a typical transaction process was seen more as a loss rather than a gain. On the other hand, consumers did not react to the mismatch between service duration and price when advantage pricing was applied (i.e., when no early check-in fees were charged). The findings of this study also indicate that price fairness perceptions influence behavioral intentions. When the price is perceived as fair, consumers are likely to return to the hotel and spread positive word of mouth. On the other hand, when the price is perceived as unfair, consumers are likely to spread negative word of mouth.

It is important for hotel firms to consider what the customer values when setting pricing (Shoemaker & Mattila, 2009). There are a few hotels that challenge the orthodoxy of the check-in and check-out time. For example, the Peninsula Hotel in Beverly Hills provide various check-in times, allowing guests to check-in during the day and stay for 24 hours after check-in, and this pricing strategy distinguished this hotel of its competitors. Likewise, hotel firms need to develop competitive pricing strategies according to their target segments.

LIMITATIONS AND FUTURE RESEARCH

There are some limitations to this study. First, this study is based on hypothetical scenarios. Consumers in real situations may encounter different individual situations (eg. loyal customers vs. first time customers) that may lead them to perceive the mismatch differently. Second, this study was limited to *service duration* rather than the amount of service customers received. The amount of facilities customers used in the hotel or the amount of services they received may influence consumer perceptions of the price. Future studies can examine the impact of mismatch between price and the amount of service on perceived price fairness. Additionally, comparing the consumer perceptions of mismatch between tangible and intangible products will extend our understanding of this area.

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