

Interactive effects of situational and enduring involvement with perceived crowding and time pressure in pay-what-you-want (PWYW) pricing

Abstract

This paper explores the differences in the interactive effects of situational and enduring involvement with perceived crowding and time pressure on customers' PWYW pricing decisions. Two empirical studies, an online experiment about a hair salon using PWYW pricing and a field-survey with customers of a real-life PWYW restaurant, are used to test all the hypotheses. In study one, situational involvement has significant direct and indirect effects on the customers' allocation of internal reference prices to their PWYW prices (RATIO), whereas enduring involvement has a positive (negative) effect under low (high) situational involvement. In study two, both enduring and situational involvement have no significant direct effects on RATIO but situational involvement has a significant negative (positive) effect for participants with low (high) enduring involvement. Besides extending both PWYW and involvement literatures, these findings would help managers understand the direct and indirect effects of situational variables on customers' PWYW pricing decisions.

Keywords: crowding; enduring involvement; internal reference price; pay-what-you-want; situational involvement; time pressure

1. Introduction

Pay-what-you-want (PWYW) is an innovative pricing mechanism that gives the buyers maximum control over the price setting process by allowing them to determine whatever price they want to pay for a product or service (Kim, Natter, & Spann, 2009; Kunter, 2015; Roy et al., 2016a, b; Schmidt, Spann, & Zeithammer, 2014). Many firms in different industries (e.g., coffee shops, music, museums, software, and charity) are using PWYW pricing to differentiate from their competitors (Bertini & Koenigsberg, 2014; Kim, Natter, & Spann, 2014; Schmidt et al., 2014). In view of its unique appeal, recent research explores many social (e.g., presence of others), individual (e.g., altruism) & pricing (e.g., reference price) variables to study PWYW pricing (e.g., Gneezy, Gneezy, Riener, & Nelson, 2012; Kim, Kaufmann, & Stegemann, 2014; Riener & Traxler, 2012; Roy et al., 2016a, b). However, there is relatively less attention paid to the role of situational influences in PWYW pricing despite their important role in consumer research (Belk, 1974, 1975).

This paper addresses this important research gap by studying the direct and indirect effects of three situational factors (involvement type, perceived crowding, and time pressure) on PWYW pricing decisions. The authors chose these variables as these are integral components of customers' shopping experience that influence customers' attitudes, emotions, and behaviors (Baker & Wakefield, 2012). Specifically, in PWYW context, customers can be driven by their ongoing interest in the product category (e.g., enduring involvement), or simply by the opportunity to try out a new experience (situational involvement). However, past literature (e.g., Dholakia, 2001) argues that based on the type of involvement, customers may focus on different aspects of the consumption (e.g., the product experience versus purchase situation). Hence, PWYW pricing may lead to uncertainty, as customers need to decide their own prices, generally in the absence of any suggested retail price, and then make these payments in front of others, which may have some social impact on them that is

difficult to estimate (Gneezy et al., 2012; Kim et al., 2009). Past evidence shows that situational (vs. enduring) involvement is more susceptible to such uncertainties associated with the purchase situation (Huang, 2006; Dholakia, 2001). However, more research is needed to understand the relationship between involvement type and other important product cues such as pricing (Dholakia, 2001).

The authors also study the moderating influence of crowding and time pressure on the influence of different involvement types. Past research shows that negative impact of crowding is less likely to affect customers driven by enduring involvement (Kyle, Graefe, Manning, & Bacon, 2004; Neuts & Nijkamp, 2012). However, there is no research comparing the interaction between perceived crowding and different types of involvement (situational and enduring). Moreover, time pressure (low time availability) has an adverse influence on shopping behavior (e.g., Vermeir & Van Kenhove, 2005) but its impact in PWYW context is not clear. Hence, this paper studies both direct and interactive effects of involvement type, perceived crowding, and time pressure on customers' PWYW pricing decision.

This paper begins by reviewing the relevant literature to develop specific hypotheses, followed by a description of two studies, an online experiment using a hypothetical hair salon setting with an online consumer panel members and a field-survey with actual diners in a real-life PWYW restaurant. The first study shows that situational involvement has significant direct and indirect effects (with time pressure and perceived crowding) on PWYW pricing decisions, whereas enduring involvement only has a significant positive effect under low situational involvement and a negative effect under high situational involvement. The second study shows no significant direct effects of either enduring or situational involvement on PWYW pricing decisions but a significant two-way interaction for enduring involvement with time pressure and a three-way interaction with time pressure and perceived crowding. In addition, situational involvement has a significant negative effect under low enduring

involvement and a positive effect under high enduring involvement. Thus, all the findings show significant differences in the direct and indirect effects of situational and enduring involvement with each other and other situational variables such as time pressure and perceived crowding. Finally, the authors discuss the conceptual contribution and managerial implications of their findings, limitations of their studies and avenues for future research.

2. Theoretical background and hypotheses

2.1. *Pay-What-You-Want Pricing*

Under PWYW pricing no minimum price is set by the sellers, who in turn must accept whatever price the buyers are willing to pay (Bertini & Koenigsberg, 2014; Roy, 2015). Such an absolute control over the final pricing generally leads to higher purchase intentions, compared to regular pricing methods (Kunter, 2015; Natter & Kaufmann, 2015; Roy et al., 2016a). There is a consensus among researchers that customers are guided by the principles of social-market relationships and not just economic considerations when deciding PWYW payments (Kim, Kaufmann, & Stegemann, 2014; Johnson & Cui, 2013). Further, given the social mechanism underlying PWYW payment, customers experience difficulties in deciding their own payments, especially in presence of others (Gneezy, Gneezy, & Lauga, 2014). This uncertainty is further enhanced in the absence of external reference price, with customers relying on their internal reference price to decide PWYW payments (Kim et al., 2009).

2.2. *Internal reference price (IRP)*

Internal reference price (IRP) is a price in the buyers' memories that serves as a basis for judging or comparing actual prices (Chandrashekar, 2012). It is based on actual, fair, or other price concepts (Garbarino & Slonim, 2003) and can be used as an internal standard to judge and compare offered prices (Mazumdar, Raj, & Sinha, 2005). Customers often draw on their memory for such past prices in a purchase situation (Mazumdar & Papatla, 2000). In

PWYW context, customers often rely on IRP because as a memory-based cue it may help them decide the price they are willing to pay. For example, Kim et al. (2009) use a series of field experiments in different PWYW settings (restaurant, cinema and delicatessen) to show that buyers are willing to discharge a higher proportion of their internal reference price (IRP) to the seller in all the three settings. They refer to this proportion $a_{ij} = P_{ij}^{PWYW} / RP_{ij}$ where P_{ij}^{PWYW} is PWYW prices paid, and RP_{ij} refers to the internal reference price. Other researchers have used this ratio as their key dependent variable (Roy, 2015; Roy et al., 2016a). Hence, this paper also uses the ratio of PWYW prices that the customers are willing to pay (PTP) to their IRP (i.e., $PTP / IRP = \text{RATIO}$) as the dependent variable.

2.3. *Situational and enduring involvement*

Involvement is the level of personal relevance and importance attached by customers to an object (e.g., a product or a purchase decision) based on their inherent needs, values, and interests (Zaichkowsky, 1985). Extant research classifies involvement as enduring and situational (Dholakia, 2001; Havitz & Mannell, 2005; Wakefield & Inman, 2003). Enduring involvement represents an intrinsic concern with the product class associated with individual's self-concept, values, and egos (Dholakia, 2001). For example, a product (e.g., sports shoes) may allow a person (e.g., a sportsperson) to signal self-concept and build higher enduring involvement with the product (Havitz & Howard, 1995; Richins et al., 1992). Under enduring involvement, customers engage deeply with the product and focus on the inherent satisfaction it provides, rather than on the situation in which they encounter the product (Huang, 2006; Dholakia, 2001). Evidence shows that when customers focus on the actual consumption experience, they are more likely to view price in its positive role (such as an indicator of quality) while making payment decisions (Ofir, 2004).

Situational involvement on the other hand is transitory and based on temporary perception of product importance under specific purchase situations (Richins & Bloch, 1986). Purchase situations characterized by higher levels of economic, time, and social risks lead to higher situational involvement (Richins & Bloch, 1986). The uncertainty associated with the consumption motivates customers to allocate higher attentional resources to appraise the situation (Dholakia, 2001). For example, customers may deliberate on the purchase situation and focus on extrinsic product cues to assess any adverse consequences under high situational involvement (Huang, 2006; Dholakia, 2001). Dholakia (2001) also shows that customers perceive higher psychological (e.g., tension associated with the purchase), functional (e.g., level of product benefits) and social (e.g., worry about others' opinions) risks associated with the purchase decision under high situational involvement.

Customers with higher enduring involvement with the product have more well-defined internal standards (e.g., reference price), and they subsequently show more confidence about engaging such standards to inform pricing decisions (Chandrashekar, 2012). In contrast, customers under high situational involvement pay more attention to extrinsic cues, are more driven by the intangible (vs. tangible) product characteristics and may be willing to pay more (Bezençon & Blili, 2010). In some situations (e.g., eco-travel), customers may be very keen to visit eco-friendly destination (i.e., high situational involvement) but they may not be willing to pay more because they may not fully understand the impact of their decisions on the local communities and the environment (Amendah & Park, 2008).

PWYW pricing provides similar uncertainty to the customers due to the absence of external price cues and it may lead to opportunistic behavior without any concern about its impact on the service provider (Roy, 2015; Machado & Sinha, 2013). Customers are also likely to perceive economic losses if they pay too much (Roy, 2015); hence, they may rely on their internal reference price to decide their PWYW prices to overcome this uncertainty (Roy,

2015; Kim et al., 2009). Moreover, customers with higher situational involvement are more likely to focus on extrinsic cues such as pricing and their immediate economic loss. Hence, they are likely to try and overcome the uncertainty induced by PWYW pricing by being more opportunistic and allocating a lower proportion of their IRP to the prices paid by them (PTP), resulting in a negative effect on RATIO (PTP/IRP). Accordingly, the authors hypothesize:

H1a. Situational involvement has a *negative* effect on RATIO, such that the customers would allocate a lower proportion of their IRP to PTP under high (vs. low) situational involvement.

Customers are also concerned about their social image as they are likely to be judged while making payments in front of others (Gneezy et al., 2012). In fact, customers often deliberate between paying prices that are detrimental to their social image versus making payments that may help them create good social impressions (Gneezy et al., 2012). Hence, customers with higher enduring involvement are more likely to focus on the intrinsic cues besides the price, such as the product or the service and their experience. Hence, they are less likely to be concerned about their perceived economic loss and focus more on their perceived benefit, which would make them be more generous and allocate a higher proportion of their IRP to their PWYW prices. Hence, the authors posit:

H1b. Enduring involvement has a *positive* effect on RATIO, such that the customers would allocate a higher proportion of their IRP to PTP under high (vs. low) enduring involvement.

2.4. Perceived crowding

Perceived crowding is described as a confined, constrained, and restricted physical setting reflecting customer's negative psychological reaction to the human density of a place (Baker & Wakefield, 2012). Perceived crowding leads to dysfunctional environment as it curbs personal space and behavioral freedom and may also cause psychological stress (Machleit, Eroglu, & Mantel, 2000). In a crowded environment, an overexposure to a multitude of

stimuli (e.g., too many people) may lead to cognitive overload and inhibit processing of product related cues (Harrell et al., 1980). Higher levels of perceived crowding generally has a negative influence on shopping behaviors. For example, customers may reduce their shopping time, alter their shopping goals and purchase less quantities in response to crowding (Baker & Wakefield, 2012; Grewal, Baker, Levy, & Voss, 2003; Machleit et al., 2000).

Interestingly, perceived crowding may also have a positive influence on customer behavior. For example, a crowded restaurant or bar may connote positive product attributes like quality and popularity (Noone & Mattila, 2009), which in turn would motivate customers to dine in (Ha, Park, & Park, 2016; Machleit et al., 2000). However, in PWYW context, perceived crowding may signal that the service provider is doing well so the customers may not want to pay a high price. Moreover, they would have to wait longer before being served, and hence, they would like to be compensated for the extra time with a lower price. Hence,

H2a. Perceived crowding has a negative effect on RATIO, such that the customers allocate a lower proportion of their IRP to price to pay (PTP), under high (vs. low) perceived crowding.

Next, the authors argue that perceived crowding may interact with involvement type. Specifically, customers with higher enduring involvement (e.g. ongoing interest in an activity like hiking) perceive crowding more favorably and are more tolerant of crowds (Kyle et al., 2004). Similarly, seasoned tourists with greater enduring involvement with travel focus more on their experiences than on the crowds (Neuts & Nijkamp, 2012). In contrast, customers with higher situational involvement may perceive crowding less favorably. For example, higher situational involvement makes the customers pay more attention to product cues (Richins et al., 1992) but a crowded environment will inhibit detailed cognitive processing of the product-related information and thus lead to greater perceived risk. Similarly, crowding

may increase uncertainty under higher situational involvement by increasing the salience of social concerns (e.g., self-image) due to greater perceived social presence. Hence, as follows:

H2b. Perceived crowding negatively moderates the negative effect of situational involvement on RATIO, such that the negative effect of situational involvement on RATIO is stronger under high (vs. low) perceived crowding.

H2c. Perceived crowding positively moderates the positive effect of enduring involvement on RATIO, such that the positive effect of enduring involvement on RATIO is stronger under high (vs. low) perceived crowding.

2.5. *Time pressure*

Time pressure is an important situational factor that influences customer purchase behaviors, wherein the time available is perceived to be less than the time required to complete shopping tasks (Yao & Oppewal, 2016). Under time pressure, customers are more selective in their choice of relevant product information to ensure faster decision making (Dhar & Nowlis, 1999). Limited time available for shopping may also increase arousal and stress levels that may impede information retrieval from memory (Park, Iyer, & Smith, 1989). Time pressure also impedes processing of product information that may adversely affect product evaluations (Yao & Oppewal, 2016). Time pressure may also lead to lower purchase volume (Park et al., 1989), reduced information search and in-store browsing (Vermeir & Van Kenhove, 2005) and lower shopping enjoyment (Kim & Kim, 2008). Hence, in a PWYW setting, high time pressure may make the customers pay less attention to the product cues and not enjoy their experience as much as they would under low time pressure. Hence,

H3a. Time pressure has a negative effect on RATIO, such that the customers allocate a lower proportion of their IRP to price to pay (PTP), under high (vs. low) time pressure.

The authors argue that the type of involvement would also interact with time pressure because a lack of time or being in a rush may impede detailed cognitive processing of product-related information. As time pressure restricts retrieval of memory based information (e.g., internal reference price) it will further enhance uncertainty for situational involvement, especially in the absence of external PWYW pricing cue. However, for enduring involvement, time pressure will have different implications. Customers with ongoing product interests have well defined internal standards like reference price and are aware of key attributes that have been assimilated from past product experience (Roy, 2015; Chandarshekar, 2012). Based on prior experiences, these customers will be able to quickly recall relevant information and use them for decision making, despite the time pressure. In fact, when subjected to time pressure, customers can use selective attributes that they perceive as diagnostic for decision-making (Yao & Oppewal, 2016). Further, while making a product choice based on attributes, time pressure had the least impact on attributes that were perceived as important (e.g., price, durability) for decision making. Hence, as follows:

H3b. Time pressure negatively moderates the negative effect of situational involvement on RATIO, such that the negative effect of situational involvement on RATIO is stronger under high (vs. low) time pressure.

H3c. Time pressure positively moderates the positive effect of enduring involvement on RATIO, such that the positive effect of enduring involvement on RATIO is stronger under high (vs. low) time pressure.

2.6. *Three-way interaction between involvement type, crowding and time pressure*

Given the role of time pressure in information processing and retrieval, it is also likely to affect the two-way interactions between involvement type and crowding (H2b and H2c). So far, the authors posit that perceived crowding negatively moderates the influence of

situational involvement by enhancing social risk (e.g., image) and inhibiting information processing. High time pressure should therefore make this worse, compared to low time pressure. Similarly, the authors argue that perceived crowding may have a positive influence on enduring involvement as customers with high enduring involvement are likely to be more tolerant of crowding. In fact, due to their well-developed internal standards and experiences, they may even interpret crowding as a signal of quality. Time pressure may exaggerate this tendency, as high enduring involvement is able to rely on quick information retrieval (e.g., reference price, product attributes) that may be used for decision making. Hence, as follows:

H4a. Time pressure *moderates* the two-way interaction between situational involvement and perceived crowding, such that the interactive effects of situational involvement and crowding will be stronger (i.e. the RATIO will be lower) under higher (vs. lower) time pressure.

H4b. Time pressure *moderates* the two-way interaction between enduring involvement and perceived crowding, such that the interactive effects of enduring involvement and crowding will be stronger (i.e. the RATIO will be higher) under higher (vs. lower) time pressure.

Figure 1 summarizes all the hypotheses.

< Insert figure 1 about here >

3. Methodology

3.1. Study 1 – Online experiment

3.1.1. Sample and procedure

This study used an online experiment with a hypothetical hair salon as the research setting to test all the hypotheses related to situational involvement and its interactions with perceived crowding and time pressure, while controlling for enduring involvement and other variables that could potentially influence customers' PWYW pricing decisions. The authors created

eight experimental conditions using a 2 (perceived crowding: low vs. high) x 2 (situational involvement: low vs. high) x 2 (time pressure: low vs. high) between-subjects design. 281 (61.6% male) members of an Australian online customer panel were randomly allocated to these eight conditions. Table 1 summarizes the sample profile.

< Insert table 1 here >

First, the participants read one of the eight versions of a basic scenario about getting a haircut during a typical weekend shopping trip. Next, the authors manipulated the three situational factors: i) Situational involvement with the type of haircut - usual hair style (low involvement) versus a new hairstyle (high involvement), ii) Perceived crowding with the number of customers waiting - nearly empty with few customers (low crowding) versus many customers (high crowding), and iii) Time pressure with the amount of time available to get the haircut - a lot of time (low time pressure) versus very little time (high time pressure).

After reading the scenarios, all the participants completed three scales for manipulation checks (situational involvement, perceived crowding, and time pressure). Next, they recorded the price they would be willing to pay (PTP) for a haircut in the scenario followed by their internal reference price (normal price for a similar offer at any other hair salon). Finally, the participants completed the scales for price consciousness (Donthu & Gilliland, 1996), enduring involvement (Sharma, 2011), attitude towards crowding (Machleit et al., 2000) and risk avoidance (Sharma, 2010). Participants also completed a three item negative emotion (e.g. frustration, bored) scale followed by the demographic variables (age, gender, and income). All these are used as covariates (control variables) in the data analysis.

3.1.2. Data analysis and results

The authors began by testing the measurement model using Confirmatory Factor Analysis with AMOS 22.0 and found a close fit ($\chi^2 = 206.61$; $df = 137$; $\chi^2/df = 1.51$; RMSEA = .042;

SRMR = .048; CFI = .98; NFI = .93; TLI = .97) with all the fit indices better than the recommended cut-off values (Hu & Bentler, 1999). All the parameter estimates are high (.62 – .88) and load significantly ($p < .001$) on their respective latent constructs with no major cross-factor loadings, showing convergent validity (Anderson & Gerbing, 1988). None of the confidence intervals of the correlation coefficients for each pair of scales (Φ estimates) includes 1.0, thus showing discriminant validity (Anderson & Gerbing, 1988). High construct reliabilities (.75 to .88) and average variance extracted (AVE) (.53 to .67) show that all the scales are reliable (Bagozzi & Yi, 1988). The AVE value for each construct is higher than the square of its correlations with all the other constructs in the model, providing further evidence of discriminant validity (Fornell & Larcker, 1981). Table 2 shows the descriptive statistics and table 3 shows the correlations and psychometric properties for all the scales.

< Insert tables 2 and 3 about here >

Multivariate analysis of variance (MANOVA) is used to check the manipulations by comparing the average scores for situational involvement, perceived crowding, and time pressure across the experimental conditions. First, the participants under low situational involvement ($M=2.52$) show a significantly lower score ($F=93.30$, $p < .001$) than those under high situational involvement condition ($M=4.76$). Similarly, participants under low crowding ($M=2.72$) show a significantly lower score ($F=230.00$, $p < .001$) for perceived crowding than those under high crowding condition ($M=5.82$). Finally, participants under low time pressure ($M=5.29$) show a significantly higher score ($F=156.41$, $p < .001$) for time available than those under high time pressure condition ($M=2.55$). Hence, all the manipulations are successful.

Next, the authors used a four-way analysis of covariance (ANCOVA) to test all the hypotheses, with both situational (manipulated as low and high) and enduring involvement (median-split into low and high), perceived crowding and time pressure (both manipulated as

low and high) as between-subjects factors. As advised in extant literature (Kim, Kaufmann, & Stegemann, 2014; Kim, Natter, & Spann, 2014), RATIO was calculated by dividing the price to pay (PTP) by the internal reference price (IRP) in order to control for IRP, and it was used as the dependent variable, with study realism, negative affect, price consciousness, attitude towards crowding and risk aversion as covariates. Table 4 and Figure 2 summarize all the results with average scores for RATIO in all the conditions used as the dependent variable.

< Insert table 4 and figure 2 about here >

As expected, RATIO has a higher value under low ($M=.81$) versus high situational involvement ($M=.72$) conditions ($F=4.72, p < .05$), hence H1a is supported. RATIO also has a significantly higher value under low ($M=.81$) versus high crowd ($M=.72$) condition ($F=6.38, p < .05$), thus H2a is also supported. RATIO has a higher value under low ($M=.78$) versus high ($M=.75$) time pressure conditions but it is not significant ($F = .38, p > .05$), hence H3a is not supported. Next, the two-way interaction between situational involvement and perceived crowding is also significant ($F (1, 281) = 7.37, p = < .01$), with a significantly lower value of RATIO ($M = .62$) under high involvement and high crowding compared to the other three conditions, hence H2b is supported. However, the interaction between time pressure and situational involvement ($F (1,281) = .01, p > .91$) is not significant, hence H3b is not supported. Similarly, the other two-way interaction between time pressure and crowding ($F (1,281) = .71, p > .40$) is also not significant.

Next, the three-way interaction among time pressure, perceived crowding, and situational involvement is significant ($F (1, 269) = 13.56, p < .05$). To interpret this result, the authors tested the two-way interactions between situational involvement and perceived crowding separately under low and high time pressure conditions. The results show significantly higher differences in the value of RATIO between low versus high crowding under low involvement

(.74 - .90 = -.16) and high involvement (.89 - .59 = .30) conditions, under low time pressure ($p < .001$). In contrast, there is no significant difference in the values of RATIO between low versus high crowding under low involvement (.88 - .72 = .16) and high involvement (.75 - .66 = .09) conditions, under high time pressure ($p > .05$). Hence, H4a is also supported. Finally, none of the covariates (study realism, negative affect, price consciousness, attitude towards crowding, and risk aversion) has any significant effect on RATIO.

Interestingly, there is no significant direct effect of enduring involvement on RATIO (Low = .76 and High = .77; $p > .80$), two-way interactions with time pressure ($p > .33$), crowding ($p > .53$) and situational involvement ($p > .88$) or the three- and four-way interactions (as shown in table 4 and figure 2). To further investigate this, Hayes' (2013) PROCESS Macro (Model 3) with 5000 bootstrapped samples is used to test the effects of enduring involvement (EINV) and its interactions with time pressure (TP) and crowding (PC) on RATIO while controlling for situational involvement (SINV) as a covariate. Once again, there are no significant direct effects of enduring involvement, time pressure and perceived crowding but situational involvement still have a negative effect on RATIO. There is also a significant two-way interaction between enduring involvement and crowding ($\beta = -.08$, $p = .02$) but no significant interaction between enduring involvement and time pressure (EINV x TP: $\beta = -.009$, $p = .80$) and no significant three way interaction (EINV x TP X PC) is also not significant ($\beta = -.002$, $p = .40$). Therefore, situational involvement seems to dominate over the effect of enduring involvement in this study but it is not clear if and how the effects of enduring involvement may vary under different levels of situational involvement.

Next, the authors divided their sample into two groups based on low and high situational involvement and used a three-way ANCOVA to test the differences in the impact of enduring involvement on RATIO between these two groups. They found a positive effect of enduring involvement under low situational involvement and a negative effect under high situational

involvement. Although non-significant ($p > .05$), this interaction suggests that situational involvement may not ‘dominate’ the impact of enduring involvement as shown by the earlier findings, and that it may instead affect the direction of the impact of enduring involvement under low and high situational involvement. To further explore this interaction, the authors tested it one by one with the three items in the enduring involvement scale, and found a significant interaction ($p < .05$) for item #3 (Getting haircuts in salon is an important part of my lifestyle). Specifically, the dependent variable RATIO shows a lower value under low (0.78) versus high (.85) enduring involvement for low situational involvement participants, and a significantly higher value under low (0.74) versus high (.69) enduring involvement for the high situational involvement participants.

These results were also tested using multiple regression analysis with the three items for enduring involvement as independent variables and RATIO as the dependent variable with the sample divided into two groups for low and high situational involvement participants. As expected, item #3 shows a positive but non-significant effect for the low situational involvement group ($\beta = .13, p > .05$) and a negative and significant effect in the high situational involvement group ($\beta = -.23, p < .05$). Both these results confirm that the impact of enduring involvement is different under the influence of low and high situational involvement. Next, the authors discuss the implications of these findings.

3.1.3. Discussion

Study one investigates the effects of three situational variables (perceived crowding, situational involvement, and time pressure) on customers pricing decision under PWYW context using a hair salon as the research setting. The results support the hypothesized direct negative effects of situational involvement (H1a) and perceived crowding (H2a) on RATIO, the allocation of customers’ internal reference prices to the PWYW prices they are willing to

pay. Some of the hypothesized interactive effects are also supported, wherein perceived crowding negatively moderates the negative effect of situational involvement on RATIO (H2b), and this effect is significantly stronger under high time pressure (H4a), as shown in figure 2. Although H3b is not supported ($p > .05$), its results are in the hypothesized direction, with a higher value of RATIO under low situational involvement and low time pressure (.82) versus high situational involvement and high time pressure (.71). Thus, the overall main effect of situational involvement seems to be significant in the high time pressure condition whereas it appears to collapse across the two conditions of perceived crowding under low time pressure. In other words, both situational involvement and perceived crowding seem to influence PWYW prices under high time pressure, whereas under low time pressure both these variables have an interactive effect on PWYW prices.

The authors also tested the direct and indirect effects of both enduring and situational involvement and found no significant direct effect of enduring involvement, two-way interaction with time pressure or three-way interaction (EINV x TP x PC). However, they did find a significant positive effect of enduring involvement under low situational involvement and a negative effect under high situational involvement, which suggests that customers may be attracted to a product or service under PWYW pricing because of their intrinsic interest (high enduring involvement) even when their situational involvement is low. In contrast, when customers are attracted by PWYW pricing, it may raise their situational involvement but their high enduring involvement may hold them back by raising their perceived risk in such a situation. The authors also found a significant negative interaction between enduring involvement and crowding, hence the positive effect of enduring involvement may be negatively moderated by perceived crowding. All these findings extend current PWYW research by showing that situational factors such as situational involvement, time pressure, and perceived crowding can also influence PWYW prices.

Study one uses an online experimental design to manipulate three situational variables (perceived crowding, situational involvement, and time pressure) using hypothetical scenarios about a fictitious hair salon. However, as hypothesized earlier, customers are expected to respond quite differently under the influence of enduring involvement. Therefore, the second study used a field survey with actual customers of a restaurant using PWYW pricing, to test all the hypotheses related to enduring involvement and its interactions with perceived crowding and time pressure, while controlling for situational involvement and other variables that could potentially influence customers' PWYW pricing decision.

3.2. Study 2 – Field survey

3.2.1. Sample and procedure

This study used a real-life PWYW restaurant in a major Australian city as the research setting. A team of well-trained research assistants approached all the customers as they walked out after finishing their meal at this PWYW restaurant and requested them to participate in this study. They made about 1000 contacts and collected 253 completed questionnaires, showing a response rate of about 25%. The authors controlled for any selection or non-response bias by sampling during all opening hours of the restaurant during a three-week period. Seven responses were discarded due to incomplete answers, giving a final sample with 246 (53.3% male) responses. The average age of respondents is about 29 years and average income is about \$3500 per month. Table 1 shows the sample profile.

All the participants completed a structured questionnaire with scales for perceived crowd (PC), enduring involvement with eating out at restaurants (EINV), time pressure (TP), internal reference price (IRP) and price paid for their meal (i.e. PTP). This study also included situational involvement (SINV), satisfaction (SAT), and loyalty (LOY) towards the restaurant, altruism (ALT), price consciousness (PCO), and social desirability (SD) as control

variables, to filter out the possible effects of these variables on the customers' pricing decisions, based on prior PWYW studies (Kim et al., 2009; Roy et al., 2016a).

3.2.2. *Measures*

All the constructs were measured by adapting well-established scales to the context of this study, including a five-item perceived crowding scale (Machleit, Kellaris, & Eroglu, 1994), a four-item enduring involvement scale (Sharma, 2011), a five-item scale for altruism (Kim et al., 2009), a three-item scale for price consciousness (Donthu & Gilliland, 1996), a five-item scale for social desirability (Hays, Hayashi, & Stewart, 1989), four-items scales for satisfaction (Oliver, 1980) and loyalty (Kim et al., 2009), and a four item scale for attitude towards crowding (Machleit et al., 2000), all using seven-point Likert-type response formats. A nine-item bipolar semantic differential scale was used for situational involvement with the restaurant (Zaichkowsky, 1985).

Time pressure was measured with a single-item, "were you under any time pressure for your dine-in experience today?" with a seven-point scale (1 = "not at all" to 7 = "extremely"). Internal reference price was measured as the price normally paid by the customers for a similar restaurant meal (Kim et al., 2009; Roy, 2015). Price paid (PTP) is the amount of money (in Australian dollars) reported by the customers that they paid for their meal, divided by the number of persons for whom the money was paid. Finally, RATIO (PTP/IRP) was calculated by dividing the "price paid" (PTP) by internal reference price (IRP), as recommended (Kim, Kaufmann, & Stegemann, 2014; Kim, Natter, & Spann, 2014).

3.2.3. *Common method variance*

As this study used a single survey and collected the data for both the independent and dependent variables from the same source (i.e., the respondents) in a single sitting, the authors took several precautions to minimize the adverse impact of common method variance

(CMV). First, they carefully crafted the cover letter assuring the respondents' anonymity and requesting for their true responses. Second, they did not collect any personal information from the participants in order to reduce any socially desirable responses and evaluation apprehension by ensuring the anonymity of the responses. Third, the scales used in the study used different response formats, such as Likert scale and semantic differential scale, which further helps reduce the common method bias that may occur due to commonalities in scale endpoints and anchoring effects (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Fourth, they measured the pivotal outcome variable (i.e. price paid) using the amount of money that the customers said that they paid instead of an attitudinal scale like the ones they used to measure all the latent constructs (independent variables). This also helped control for possible common method variance through psychological separation of measurement (Podsakoff et al., 2003). Although it is difficult to identify the exact source(s) of CMV, these procedural remedies help minimize the common method bias in this study. In addition, they used Harman's single-factor test, wherein the un-rotated factor solution for all the items used in the study generated more than a single-factor, which suggests that common method bias is not a problem in this study (Podsakoff et al., 2003).

3.2.4. Data analysis and results

The data analysis began by testing the measurement model using Confirmatory Factor Analysis with AMOS 22.0 and found a close fit ($\chi^2 = 1335.39$; $df = 828$; $\chi^2/df = 1.61$; RMSEA = .045; SRMR = .054; CFI = .95; NFI = .90; TLI = .93) with all the fit indices better than the recommended cut-off values (Hu & Bentler, 1999). All the parameter estimates are high (.69 to .92) with significant ($p < .001$) loadings on their respective latent constructs, showing convergent validity. None of the confidence intervals of the correlation coefficients for each pair of scales (Φ estimates) includes 1.0, showing discriminant validity (Anderson &

Gerbing, 1988). High construct reliabilities (.79 to .96) and average variance extracted (.54 to .79) show that all the scales are reliable (Bagozzi & Yi, 1988). Finally, the AVE for each construct is higher than the square of its correlations with all the other constructs, thus providing further evidence of discriminant validity (Fornell & Larcker, 1981). Table 5 and 6 show the descriptive statistics, correlations and psychometric properties of all the scales.

< Insert Table 5 and 6 about here >

Next, the authors tested a multiple moderated regression model with the mean-centered scores for perceived crowding, enduring and situational involvement, time pressure, and their interaction terms with each other as the predictors, and RATIO as the dependent variable. As shown in table 7, most of the independent and control variables have no significant direct or indirect effects on RATIO. Specifically, the non-significant two-way interaction EINV x PC ($\beta = -.09; p > .10$) shows that H2c is not supported; however, TP x EINV ($\beta = .18; p < .05$) is significant, shows support for H3c, whereby the positive effect of enduring involvement on RATIO is stronger under high (vs. low) time pressure. The two-way interaction PC x TP ($\beta = .16; p < .10$) is only marginally significant but the three-way interaction (EINV X TP X PC) is significant ($\beta = .19; p < .05$). A closer look at this result (Figure 3) shows that the two-way interaction (EINV X PC) is stronger under higher (vs. lower) time pressure, showing support for H4b. Among control variables, altruism, price consciousness, and social desirability have significant effects on RATIO but satisfaction, loyalty, and evaluation have no significant effects. Overall, the model explains 20% variance in the dependent variable, RATIO.

< Insert Table 7 about here >

Finally, situational involvement has no significant direct effect on RATIO, hence it seems that the enduring involvement dominates over the impact of situational involvement in this study. However, it is not clear if and how the effects of situational involvement may vary

under different levels of enduring involvement. To further investigate these results, the authors divided the sample into two groups based on enduring involvement for this study (low = 124, high = 122). They then tested a multiple regression model with situational involvement and its interactions with the other independent variables and RATIO as the dependent variable. A comparison of the results between the low and high enduring involvement groups shows significant differences between these groups, with a significant negative effect of situational involvement on RATIO for the low enduring involvement group ($\beta = -.24, p < .05$), and a significant positive effect on the high enduring involvement group ($\beta = .32, p < .05$). These results suggest that situational involvement may have contrasting effects on RATIO under low and high enduring involvement. Next, these results were tested using a three-way ANCOVA and found a significantly higher value of RATIO under low (1.31) versus high (1.15) situational involvement for low enduring involvement participants and no significant difference between low (1.30) versus high (1.30) enduring involvement for the high enduring involvement participants. Both these results suggest significant differences in the impact of situational involvement under the influence of low and high enduring involvement. The implications of these findings are discussed in the next section.

3.2.5. Discussion

Study two examines the direct and indirect effects of enduring involvement on the PWYW pricing decisions of the customers in terms of allocation of their internal reference prices on the prices they are willing to pay (RATIO) in a PWYW setting. Hence, it used a real-life PWYW restaurant as the research setting in which customers are likely to be driven by their enduring involvement with eating out in restaurants. The results show that although the direct effects of PC and EINV on RATIO are not significant, the two-way interaction TP x EINV and the three-way interaction PC X TP X INV are both significant, and in the expected direction. In other words, enduring involvement has no direct effect but has some interactive

effects with perceived crowding and time pressure on RATIO. In contrast, situational involvement has no significant direct effect on RATIO but it has a significant negative effect for low enduring involvement participants and a positive effect on the high enduring involvement participants, which suggests significant differences in the influence of situational involvement under different levels of enduring involvement. Thus, it seems that customers with low intrinsic interest (enduring involvement) may not be willing to pay higher PWYW prices merely due to the high situational involvement triggered by the ‘novelty’ of this pricing method. In contrast, the novelty of PWYW pricing may motivate customers with high enduring involvement to pay higher PWYW prices. Next section discusses the conceptual contribution and managerial implications of the findings from both the studies.

4. General discussion

To summarize the results from the two studies, Study one uses a hair salon scenario to manipulate situational involvement and to control for enduring involvement as a measured variable. In this study situational involvement has significant direct and indirect effects on RATIO, whereas enduring involvement has a positive but non-significant effect under low situational involvement and a significant negative effect under high situational involvement. Study two uses a real PWYW restaurant context to measure both enduring and situational involvement and assess the direct and indirect effects of enduring involvement while controlling for situational involvement. In this study both enduring and situational involvement have no significant direct effects but enduring involvement has significant two-way interactions with time pressure and three-way interactions with time pressure and perceived crowding. In addition, situational involvement has a significant negative effect on RATIO for the participants with low enduring involvement group and a positive effect for those with high enduring involvement.

These differences in the findings from the two studies can be explained using research on the effects of enduring and situational involvement on customer responses (e.g., Richins, Bloch, & McQuarrie, 1992; Celsi & Olson, 1988). Some of these studies show an ‘additive’ model, in which situational and enduring involvement jointly influence customer responses (Celsi & Olson, 1988), while others show a ‘ceiling’ effect, where situational involvement has no additional influence in the presence of high level of enduring involvement (Richins et al., 1992). Customers may also respond differently to enduring and situational involvement across different product categories (Richins et al., 1992). The findings seem to support this second view, wherein the impact of both enduring and situational involvement varies under different levels of situational and enduring involvement, respectively.

Based on these findings, it seems that either enduring or situational involvement may alter each other’s impact on customers’ PWYW pricing decisions. As a result, one of these may appear to be a stronger driver of customers’ PWYW pricing decisions in any given situation than the other. Accordingly, Study one shows that in a ‘hypothetical’ hair salon scenario, situational involvement has a direct effect on RATIO, whereas enduring involvement shows a positive effect under low situational involvement and a negative effect under high situational involvement. In contrast, Study two uses a survey design in an ‘actual’ restaurant setting, hence other variables besides either enduring or situational involvement seem to be more salient in this context. Thus, enduring involvement has no direct effect on RATIO, whereas situational involvement has a negative effect for low enduring involvement participants and positive effect for those with high enduring involvement. Overall, both the studies together provide a reasonably strong evidence about the differences in the roles of enduring and situational involvement either directly or interactively with two other important variables, time pressure and perceived crowding.

4.1. Theoretical contribution

This paper addresses two important gaps in PWYW literature. First, prior research focuses on the economic, psychological and social antecedents of PWYW pricing decision, ignoring the impact of situational variables, hence it is still not clear how and when customers decide to pay high or low prices (Gneezy et al., 2014). This paper explores the direct effects of three situational variables (perceived crowding, involvement level, and time pressure) as well as their interactions with each other on the prices that customers are willing to pay in a PWYW setting. Second, this paper introduces the differences in the influence of situational and enduring involvement (Dholakia, 2001) to PWYW context, to explore the conditions under which their interactions with two other situational variables (perceived crowding and time pressure) have contrasting effects on customer decisions.

The first study uses an online experiment using a hair salon setting with members of an online panel, to show that situational involvement has significant direct and indirect effects on the allocation of IRP to the PWYW prices (RATIO) but enduring involvement has a positive effect under low situational involvement and negative effect under high situational involvement. Next, the second study uses a field survey with actual customers of a real-life PWYW restaurant, to show that neither enduring nor situational involvement have any significant direct effects but enduring involvement has significant two-way interactions with time pressure and three-way interactions with time pressure and perceived crowding in their effects on RATIO. Moreover, situational involvement has a negative effect under low enduring involvement and positive effect under high enduring involvement. Overall, both these studies help extend past research on PWYW pricing by looking beyond personal and pricing attributes such as altruism, price consciousness, internal reference prices and fairness perceptions, to show that situational factors such as perceived crowding, enduring and situational involvement, and time pressure can have significant direct and interactive effects on the prices that customers are willing to pay.

The findings from both the studies also provides deeper insights into the findings from past research that do examine the role of situational factors in PWYW pricing. For example, Riener and Traxler (2012) suggest that perceived crowding may encourage free riding (under the assumption that other customers are paying enough to recover costs) and drive PWYW prices down. The findings show that the negative impact of perceived crowding may not be so straightforward and instead it may interact with other situational factors such as time pressure and involvement level. This paper also shows that the interaction among these situational variables may be stronger when the customers are under the influence of higher situational (vs. enduring) involvement. However, these effects may be more nuanced than what has been argued in the past (e.g., Richins et al., 1992; Roy, 2015).

For example, past research on PWYW pricing shows that involvement level has an adverse impact on PWYW prices (Roy, 2015) but it does not distinguish between different types of involvement. This paper addresses this gap and extends the current knowledge on the impact of involvement in PWYW context by offering nuanced insights on the interactive effects of situational and enduring involvement on customers' pricing decisions. Specifically, the impact of enduring involvement on customers' pricing decision is different under the influence of low vs. high situational involvement (Study 1) and the impact of situational involvement is different under the influence of low vs. high enduring involvement (Study 2). This paper advances existing involvement literature by providing deeper insights into the simple 'ceiling effect' reported in past research (e.g., Richins et al., 1992), by showing that both situational and enduring involvement may affect customers' PWYW pricing decision under each other's influence. These are important findings because these help clarify the differences in the influence of these two types of involvement.

Past research also suggests that customers may avoid PWYW prices in favor of an alternate low price option (Gneezy, Gneezy, Nelson, & Brown, 2010; Gneezy et al., 2014).

This paper offers another explanation for the above findings by showing that situational factors such as perceived crowding, time pressure and situational involvement may also make the customers choose to pay relatively lower prices in a PWYW setting. Finally, a recent study shows that contrasting motivations, such as ‘trying to be fair’ and ‘seeking a bargain’, may jointly drive PWYW prices (Kunter, 2015). This paper provides the dichotomy between situational and enduring involvement as another example of contrasting motivations acting as the drivers of PWYW pricing decisions.

4.2. *Managerial implications*

This research also have many useful managerial implications. For example, the results about the negative effect of perceived crowding on PWYW prices suggest that managers in firms using PWYW pricing should develop specific strategies to deal with high crowding situations. Managing crowds under PWYW pricing is of utmost importance for the managers because not only customers may tend to pay less in a crowded store but also they may even pay nothing for the product or the service if the store is overcrowded and this could be devastating for the PWYW firm’s bottom-line. To avoid such adverse consequences of perceived crowding, managers could redesign the store layouts to make it easier for the customers to navigate despite crowding. This is especially applicable to department stores and restaurants as congested aisles and tables create a feeling of clutter and crowding, which could damage the brand image besides affecting the PWYW prices that the customers are willing to pay (Li, Kim, & Lee, 2009). In addition, managers could address the needs of customers under high time pressure by introducing pre-booking or advance purchase systems, which could lead them to pay more under a PWYW setting, as shown by the findings.

This paper also shows a significant three-way interaction among perceived crowding, situational involvement and time pressure, wherein the two-way interaction between

perceived crowding and situational involvement is stronger when customers are under low (vs. high) time pressure. In other words, customers are willing to allocate a higher proportion of their internal reference prices to the prices they are willing to pay even under high perceived crowding when it is coupled with low situational involvement and low time pressure. Hence, managers of the firms using PWYW pricing should ensure that customers with high time pressure and high situational involvement are dealt with in a timely manner.

In addition, unlike situational involvement (Study 1), enduring involvement (Study 2) has a relatively less severe effect on customers' payment decision in PWYW context. Managers may invest in upgrading the ambience of their stores to attract customers with high enduring involvement by giving them a superior customer experience. Upgrading the internal ambience and facilitating an environment for customers to spend increased time may also induce the customers to pay higher price under PWYW context and possibly increase the level of unplanned purchases (Park et al., 1989). Retailers may also try to attract customers using the novelty of PWYW pricing to enhance situational involvement by raising their curiosity about how this pricing works. However, the findings show that the effectiveness of this strategy may depend on the customers' level of enduring involvement. For example, any regular customer may be attracted to this novel pricing due to an increase in their curiosity (hence, higher situational involvement); however, if the customer has a higher enduring involvement with the product category (e.g., an avid restaurant goer), it may prevent the customer from trying the restaurant despite the higher situational involvement.

As enduring involvement can involve signaling self-concept (Havitz & Howard, 1995), one way to deter the negative influence of high enduring involvement under high situational involvement could be to appeal to the customer's altruistic self and foster deeper engagement with the product. This may be achieved by associating the PWYW pricing with altruistic activities, such as a PWYW restaurant sponsoring charity events. In contrast, if a customer

patronizes a PWYW business based on his/her enduring involvement (e.g., a foodie for a restaurant or a fashionable customer for a hair salon), it may be useful to raise the customers' situational involvement, to encourage them to pay higher PWYW prices. One way to do this could be to display positive endorsements for the PWYW product, which may encourage customers with high enduring involvement by reducing the perceived risk.

Past research shows that customers with higher enduring involvement are more likely to disseminate product related information, similar to opinion leaders (Dholakia, 2001). Based on this, PWYW businesses can target their regular patrons with social media campaigns, such as asking them to like, comment and share their experiences on social networking sites (e.g., Facebook) or the firm's own website. This paper adds to the retailers' efforts to be more creative in designing experiences that attract more shoppers into the store (Baker & Wakefield, 2012), by suggesting that PWYW retailers should also focus on improving the influence of situational variables, such as perceived crowding, involvement and time pressure. For example, they can use standard marketing tools such as value co-creation and relationship marketing for the high involvement customers, while managing crowding in their outlets and facilitating the service experience of customers under time pressure, which would help reduce the stress felt by their customers and motivate them to allocate a higher proportion of their internal reference prices to the prices they are willing to pay.

5. Limitations and future research

This research has a few limitations that future research may address. First, both the studies use data from Australian participants; hence, more research in other countries would help test the generalizability of the findings. The authors used two different methods - an online experiment and a field survey - to operationalize situational and enduring involvement respectively, but future studies could use other methods such as lab and field experiments to

further replicate and extend their results (e.g., by studying plausible mediators and moderators). Future study can further tease out the effects of low versus high involvement first, before studying if the source of involvement (e.g., enduring versus situational) further moderates this effect. Both the studies in this paper focus on the human aspect of perceived crowding in order to keep the study design simple and to avoid any confounds. However, future research could explore the role of different types of crowding (e.g. spatial crowding or cluttered layout) to show how each type of crowding may directly contribute to important customer outcomes. Finally, availability (or lack) of time may also affect customer perceptions about crowding and its impact on their satisfaction. Future research could explore the optimal time degree of crowding that customers may tolerate especially for promotional events, activities, or programs.

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Table 1. Sample profiles (Studies one & two)

Demographic Variables	Study 1 (N=281)	Study 2 (N=246)
Gender		
Male	173 (61.6%)	131 (53.3%)
Female	108 (38.4%)	115 (46.7%)
Age		
Less than 21 years	01 (.4%)	23 (9.3%)
21 – 30 years	20 (7.1%)	100 (40.7%)
31 – 40 years	65 (23.1%)	63 (25.6%);
41 – 50 years	80 (28.6%)	31 (12.6%)
51 – 60 years	91 (32.4%)	14 (5.7%)
More than 60 years	24 (8.5%)	15 (6.1%)
Monthly Income (AUD)		
Less than \$3000	100 (35.6%)	139 (56.5%)
\$3001 - \$6000	89 (31.7%)	72 (29.3%)
\$6001 - \$9000	63 (22.5%)	24 (9.8%)
More than \$9000	29 (10.3%)	11 (4.5%)

Table 2. Scale items (Study one)

Scale Items	λ	M	SD
Perceived crowding			
The hair salon is: nearly empty 1 2 3 4 5 6 7 very crowded	--	4.27	2.38
Situational involvement			
I went to the salon for: my usual haircut 1 2 3 4 5 6 7 a new hairstyle	--	3.63	2.23
Time pressure			
For my haircut, I have: very little time 1 2 3 4 5 6 7 a lot of time	--	3.98	2.28
Enduring involvement			
I am quite familiar with getting haircuts in salons.	.88	4.81	1.63
I am quite knowledgeable about getting haircuts in salons.	.79	4.50	1.52
Getting haircuts in salon is an important part of my lifestyle.	.67	3.71	1.77
Price consciousness			
I often check the prices at different retailers before making a purchase.	.66	4.53	1.67
I usually purchase items on sale rather than those on full price.	.82	4.73	1.56
I often look for the cheapest items while shopping.	.75	4.56	1.48
Risk aversion			
I prefer a routine way of life to an unpredictable one full of change.	.62	4.49	1.26
I would not describe myself as a risk-taker.	.79	4.33	1.41
I do not like taking too many chances to avoid making a mistake.	.77	4.35	1.31
Attitude toward crowd			
I avoid crowded stores whenever possible.	.84	4.46	1.58
I am really bothered by crowded stores.	.82	4.29	1.60
If I see a store that is crowded, I would not even go inside.	.80	4.15	1.56
It is not worth going to a crowded store just to save some money.	.66	4.05	1.55
Negative emotion			
Frustration	.87	2.97	1.40
Bore	.78	3.30	1.39
Sad	.81	2.94	1.38
Price to pay (PTP) (AU\$ - Australian Dollars)			
How much would you pay for a hair cut in this scenario?	--	15.77	7.72
Internal reference price (IRP) (AU\$ - Australian dollars)			
How much do you think a similar hair cut would normally cost?	--	20.75	11.50

λ =factor loading, M=mean, SD=standard deviation

Table 3. Correlations table (Study one)

Constructs	PC^a	SINV^a	TP^a	EINV	PCO	RA	ATC	NE	PTP^b	IRP^b
Perceived crowding (PC)	--									
Situational involvement (SINV)	.07	--								
Time pressure (TP)	.09	.15**	--							
Enduring involvement (EINV)	.01	.04	.06	.79						
Price consciousness (PCO)	.06	.03	-.01	.22**	.75					
Risk aversion (RA)	.04	-.00	.06	.07	.22**	.73				
Attitude toward crowding (ATC)	.18**	.04	.02	.09	.08	.29**	.78			
Negative emotion (NE)	.09	.09	-.04	.01	-.15**	.04	.18**	.82		
Price to pay (PTP)	.04	.22**	-.03	.13*	.04	.05	.08	-.04	--	
Internal reference price (IRP)	.12*	.31**	.00	.07	-.07	.04	.03	-.03	.71**	--
Average variance extracted (AVE)	--	--	--	.62	.56	.53	.61	.67	--	--
Composite reliability (CR)	--	--	--	.83	.78	.75	.80	.88	--	--
Mean (M)	4.27	3.63	3.98	4.34	4.61	4.39	4.24	3.07	--	--
Standard deviation (SD)	2.38	2.23	2.28	1.60	1.55	1.32	1.56	1.33	--	--

Note: ^a Manipulate variables and ^b Single-item measures, hence these have no AVE or CR values. Figures on the diagonal are square roots of AVE. * $p < .05$; ** $p < .01$

Table 4. Four-way ANCOVA results (Study one)

Situational Involvement	Low Time Pressure			High Time Pressure			Overall		
	Low Crowd	High Crowd	Total	Low Crowd	High Crowd	Total	Low Crowd	High Crowd	Total
Low	.74 (.16) (n=38)	.90 (.51) (n=35)	.82 (.37) (n=73)	.88 (.30) (n=32)	.72 (.35) (n=36)	.80 (.33) (n=68)	.80 (.31) (n=70)	.81 (.40) (n=71)	.81 (.35) (n=141)
High	.89 (.39) (n=36)	.59 (.15) (n=37)	.74 (.33) (n=73)	.75 (.21) (n=35)	.66 (.16) (n=32)	.71 (.19) (n=67)	.82 (.26) (n=71)	.62 (.28) (n=69)	.72 (.27) (n=140)
Total	.81 (.24) (n=74)	.74 (.44) (n=72)	.78 (.36) (n=146)	.81 (.32) (n=67)	.69 (.16) (n=68)	.75 (.28) (n=135)	.81 (.28) (n=141)	.72 (.35) (n=140)	.76 (.32) (n=281)

Enduring Involvement	Low Time Pressure			High Time Pressure			Overall		
	Low Crowd	High Crowd	Total	Low Crowd	High Crowd	Total	Low Crowd	High Crowd	Total
Low	.82 (.30) (n=36)	.71 (.28) (n=40)	.76 (.29) (n=76)	.86 (.30) (n=32)	.70 (.33) (n=39)	.77 (.33) (n=71)	.84 (.30) (n=68)	.70 (.31) (n=79)	.76 (.31) (n=147)
High	.81 (.32) (n=38)	.78 (.52) (n=32)	.79 (.42) (n=70)	.77 (.22) (n=35)	.70 (.20) (n=29)	.74 (.21) (n=64)	.79 (.27) (n=73)	.74 (.40) (n=61)	.77 (.34) (n=134)
Total	.81 (.31) (n=74)	.74 (.40) (n=72)	.78 (.36) (n=146)	.81 (.26) (n=67)	.70 (.28) (n=68)	.75 (.28) (n=135)	.81 (.28) (n=141)	.72 (.35) (n=140)	.76 (.32) (n=281)

Note: Dependent variable = RATIO (PTP/IRP); figures in brackets are standard deviations; n = cell sizes

Table 5. Scale items (Study two)

Scale Items	λ	M	SD
Perceived Crowding			
This restaurant seemed very crowded to me.	.82	3.41	1.57
This restaurant was a little too busy.	.81	3.29	1.60
<i>There was not much crowd in this restaurant while I was eating.</i>	.20	4.23	1.91
There were a lot of diners in this restaurant.	.80	4.14	1.53
<i>The restaurant seemed very spacious.</i>	.03	2.85	1.32
<i>This restaurant would feel confining to diners.</i>	.17	3.09	1.81
Enduring Involvement			
I regularly eat out at restaurants.	.80	4.77	1.47
I am quite familiar with eating out at restaurants.	.78	5.22	1.27
I am quite knowledgeable about eating out at restaurants.	.81	5.14	1.42
Eating out at restaurants is an important part of my lifestyle.	.84	4.72	1.72
Time Pressure			
Were you under any time pressure for your dine-in experience today?	--	4.00	.96
Satisfaction			
I am satisfied with my decision to dine-in in this restaurant.	.76	4.05	.98
My choice to dine-in in this restaurant was a wise one.	.80	4.06	.97
I am satisfied with my dine-in experience in this restaurant.	.91	4.15	.90
I think I took the right decision by dining-in in this restaurant.	.86	4.15	.87
Price Consciousness			
I often check prices at different retailers before making a purchase.	.70	5.09	1.48
I usually purchase items on sale rather than those on full price.	.79	5.14	1.37
I often look for the cheapest items while shopping.	.71	4.87	1.45
Altruism			
I love to help others.	.69	5.84	.97
I have a good word for everyone.	.70	5.55	1.03
I am concerned about others.	.86	5.82	.97
I make people feel welcome.	.81	5.84	.96
I anticipate the needs of others.	.79	5.66	1.06
Social Desirability			
<i>I am always courteous even to people who are disagreeable.</i>	.06	4.73	1.30
There have been occasions when I took advantage of someone.*	.77	4.63	1.60
I sometimes feel resentful when I don't get my way.*	.76	4.20	1.50
I sometimes try to get even rather than forgive and forget.*	.71	4.54	1.64
<i>No matter who I'm talking to, I'm a good listener.</i>	.03	4.89	1.37

Loyalty			
<i>I am a regular customer of this restaurant.</i>	.44	4.14	2.13
I say positive things about this store to others.	.89	5.92	1.33
I encourage friends and relatives to dine-in in this restaurant.	.92	5.78	1.40
I speak positively about the pricing mechanism of this restaurant.	.86	5.94	1.31
Situational involvement			
Please rate your overall experience at this restaurant:			
Boring Interesting	.70	4.18	.82
Unpleasant Pleasant	.81	4.17	.93
Unenjoyable Enjoyable	.84	4.19	.89
Unappealing Appealing	.81	4.08	1.01
Inefficient Efficient	.68	4.28	.93
Useless Useful	.71	4.34	.97
Unsatisfactory Satisfactory	.74	4.33	.96
Unacceptable Acceptable	.71	4.42	.90
Poor Excellent	.74	4.28	.93
Attitude toward crowd			
I avoid crowded stores whenever possible.	.79	4.21	1.57
I am really bothered by crowded stores.	.80	4.02	1.59
If I see a store that is crowded, I would not even go inside.	.85	3.70	1.60
It is not worth going to a crowded store just to save some money.	.77	3.93	1.71
Price paid (PTP) (AU\$ - Australian Dollars)			
How much did you pay for your meal per person today?	--	9.80	6.24
Internal reference price			
How much do you think a similar meal would normally cost in a similar restaurant per person?	--	14.80	6.31
Perceived fairness			
I think my price paid was fair toward the seller.	--	5.36	1.36

Note: Items in *italics* were dropped due to poor reliability. * Reverse-coded items.
 λ =factor loading, M=mean, SD=standard deviation

Table 6. Correlation matrix (Study two)

	PC	EINV	TP^a	SAT	PCO	ALT	SD	LOY	SINV	ATC	PTP^a	IRP^a	FAIR^a
Perceived crowding (PC)	.81												
Enduring Involvement (EINV)	.19**	.80											
Time pressure (TP)	.04	.05	--										
Satisfaction (SAT)	-.17**	.01	-.08	.84									
Price Consciousness (PCO)	.06	.08	.04	.06	.73								
Altruism (ALT)	-.12	-.06	-.10	.30**	.11	.77							
Social Desirability (SD)	-.09	-.19**	-.06	.15*	-.15*	.20**	.75						
Loyalty (LOY)	-.06	-.11	.00	.43**	.15*	.26**	.07	.89					
Situational involvement (SINV)	-.05	.05	-.08	.45**	-.03	.25**	.07	.33**	.74				
Attitude toward crowd (ATC)	.16**	.02	.08	-.11	.07	.00	-.11	-.06	-.14*	.80			
Price paid (PTP)	-.05	.15*	-.06	.08	-.12	.03	.13*	-.05	.06	.05	--		
Internal reference price (IRP)	-.10	.00	-.22**	.13	-.21**	.14*	-.10	.01	.01	-.06	.17**	--	
Perceived fairness (FAIR)	.06	.17**	.05	.14*	.05	.09	.13*	-.02	.10	.04	.17**	-.05	--
Average variance extracted (AVE)	.66	.65	--	.70	.54	.60	.56	.79	.55	.64	--	--	--
Composite reliability (CR)	.86	.85	--	.90	.78	.82	.80	.96	.79	.84	--	--	--
Mean (M)	3.50	4.96	4.00	4.10	5.03	5.74	4.60	5.45	4.25	3.97	9.80	14.80	5.36
Standard deviation (SD)	1.60	1.48	.96	.95	1.42	1.00	1.48	1.43	.93	1.60	6.24	6.31	1.35

Note: ^a Single-item measures, hence these have no AVE and CR values. Figures on the diagonal are square roots of AVE. * $p < .05$; ** $p < .01$

Table 7. Moderated multiple regression output (Study two)

Dependent Variable = RATIO	Full sample (N=246)	Low EINV (N=124)	High EINV (N=122)
Independent Variables			
Enduring involvement (EINV)	.21	-	-
Situational involvement (SINV)	.07	-.24*	.32*
Perceived crowding (PC)	.08	.15	-.02
Time pressure (TP)	-.03	-.01	.05
SINV x PC	-.03	-.31*	.25*
EINV x PC	-.09	-	-
EINV x TP	.18*	-	-
SINV x TP	-.02	.06	.02
SINV x EINV	.17*	-	-
TP x PC	.16#	-.05	.21*
SINV x TP x PC	-.08	-.20*	.12
EINV x TP x PC	.19*	-	-
SINV x EINV x TP	.08	-	-
SINV x EINV x PC	.08	-	-
SINV x EINV x TP x PC	.05	-	-
Control Variables			
Satisfaction (SAT)	-.10	-.08	-.12
Price consciousness (PCO)	.23**	.29**	.18*
Altruism (ALT)	-.18*	-.21*	.15
Social desirability (SD)	.21*	.27**	.14
Loyalty (LOY)	-.04	-.06	-.03
Attitude toward crowding	.03	.05	.02
Perceived fairness (FAIR)	.02	.02	.02

$p < .10$, * $p < .05$, ** $p < .01$

Figure 1. Conceptual model

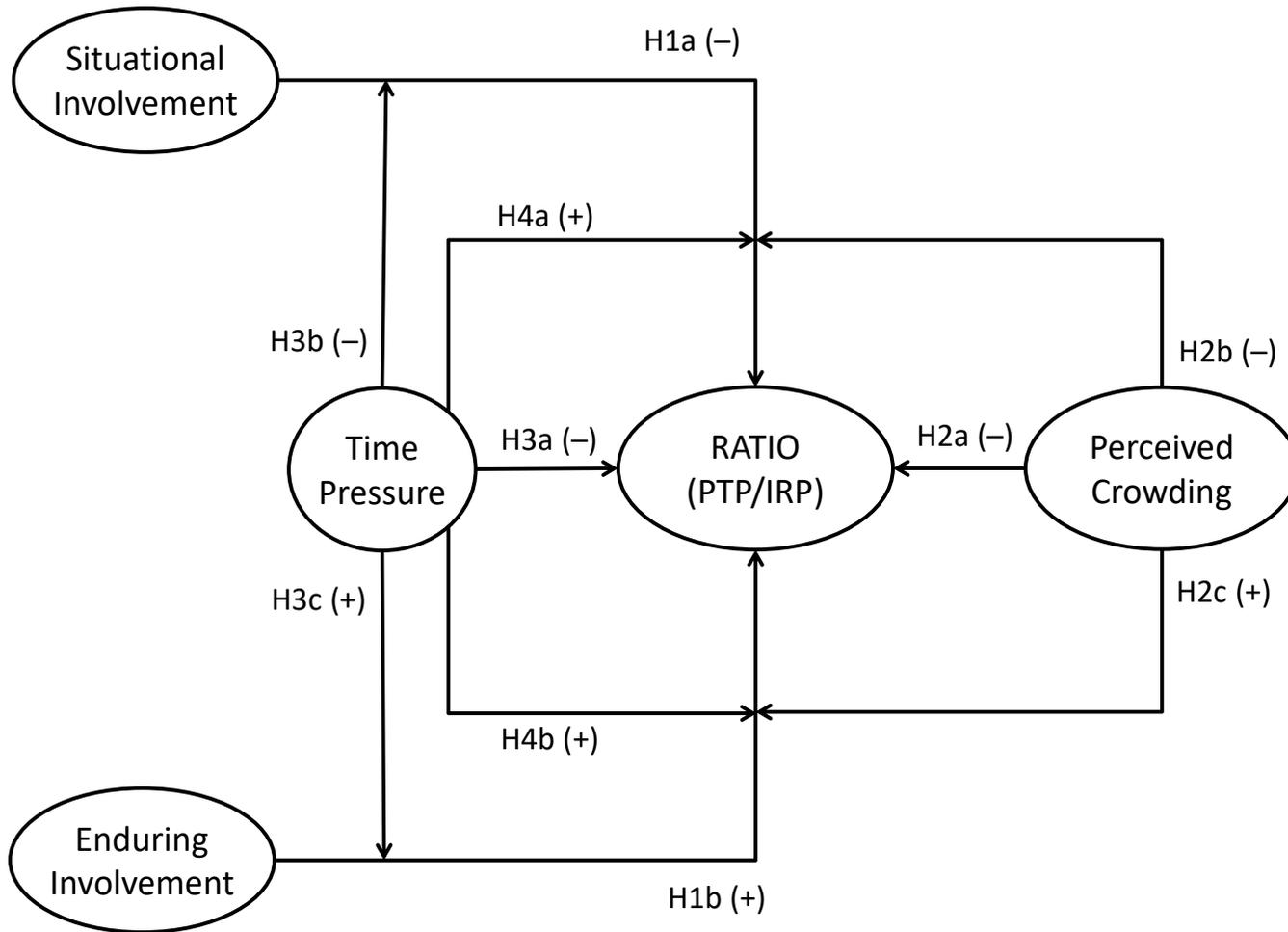


Figure 2. Situational and enduring involvement interactions with perceived crowding under low vs. high time pressure (Study 1)

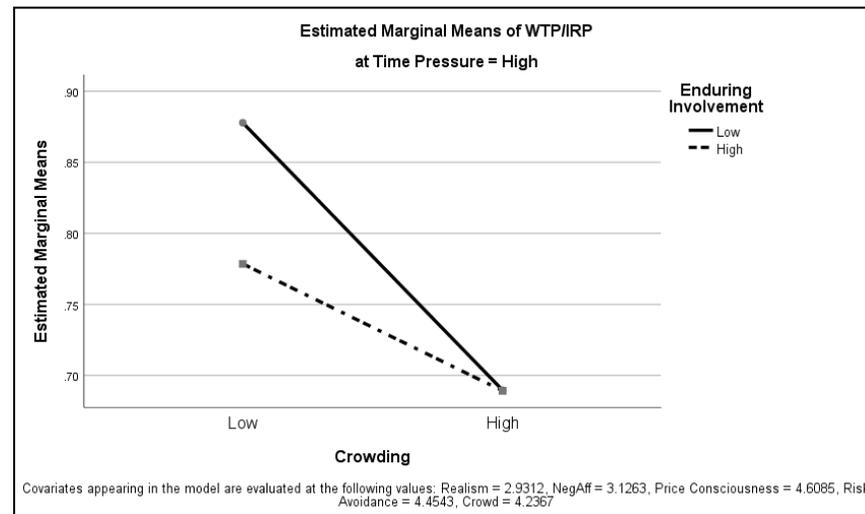
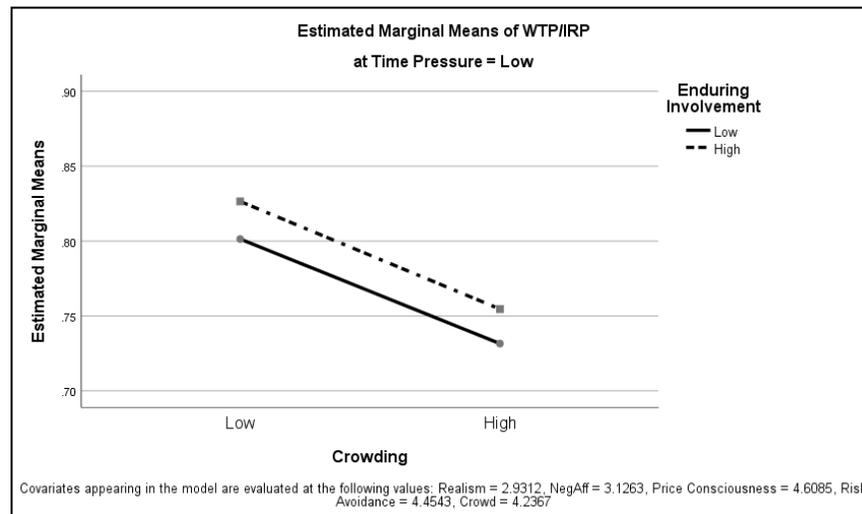
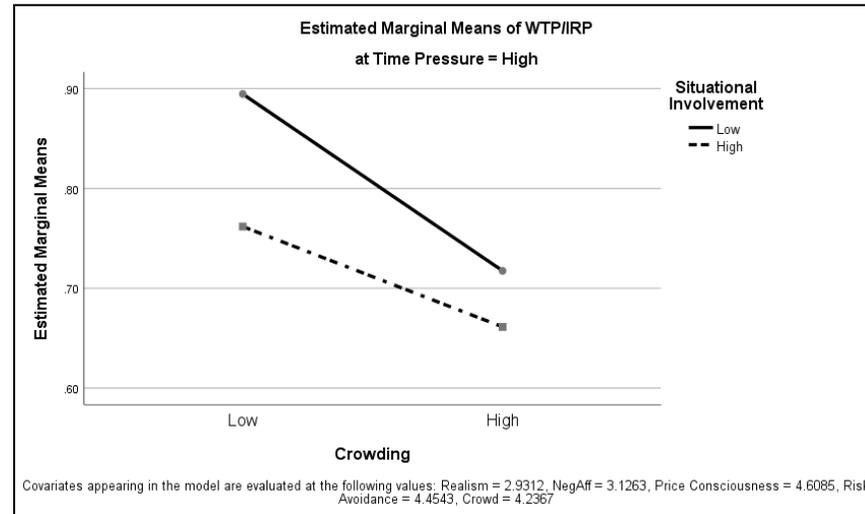
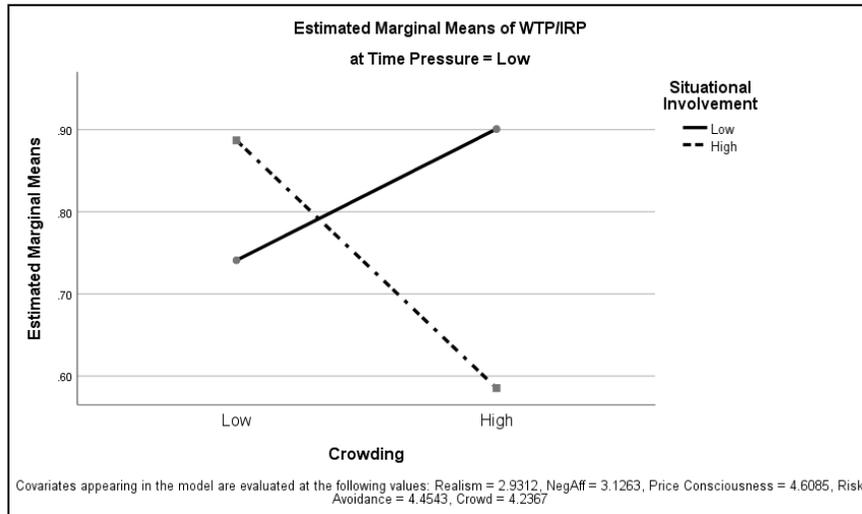


Figure 3. Enduring and situational involvement interactions with perceived crowding under low vs. high time pressure (Study 2)

